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Perceived Motivation and Evaluation: Effects of Intention Cues and Effort Cues on Attribution of Responsibility and Evaluate Judgements of Elementary School Teachers

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PERCEIVED MOTIVATION AND EVALUATION: EFFECTS OF INTENTION CUES AND EFFORT CUES ON ATTRIBUTION OF RESPONSIBILITY AND EVALUATIVE JUDGMENTS OF ELEMENTARY SCHOOL TEACHERS

BY

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ABSTRACT

This study investigated the relationship between responsibility ascriptions and teacher evaluations of pupils' achievements, emphasizing the examination of differential intention and effort effects. The purpose of this study was to clarify distinctions between information about "intention" and information about "effort" that are suggested by the underlying theory of attribution but have been neglected in prior experimental tests of the theory. An additional purpose of the study was an examination of the theoretical assumption that ascriptions of responsibility mediate evaluative judgments.

It was hypothesized that both situational and motivational cues would affect evaluative judgments. It was predicted that locus of outcome consequence would affect evaluations such that positive evaluations for success and negative evaluations for failure would be intensified when the outcome had effects for others as well as for the student performing the action. On the basis of theoretical propositions it was predicted that intention cues and effort cues would have different effects on evaluations. It was also hypothesized that motivational cues would affect responsibility ascriptions, and that there would be a positive relationship between responsibility ascriptions and evaluations.

Packets of stories were presented to 72 teachers of grades three through six. Half of the subjects received 18 stories with an individual outcome consequence and half received 18 with a group outcome consequence. Half of the subjects in each situation first made

evaluations of and then determined personal responsibility of the students in each of the stories, while half of the subjects completed the tasks in the reverse order. Stories varied on two motivational cues, intention (high, average, low) and effort (high, average, low), and outcome (pass, fail). Evaluations were made according to an eleven point scale, ranging from 5 (high positive) to -5 (high negative); responsibility ratings were made on a scale from 1 (not at all responsible) to 5 (completely responsible).

Previous findings regarding locus of outcome consequence were not supported. Evaluative judgments were significantly affected by intention, effort, and outcome, with interactions found between intention x outcome and between effort x outcome, and with different patterns apparent for intention effects than for effort effects. Effects of effort on evaluation were magnified when evaluations were obtained after responsibility was overtly ascribed. Responsibility ascriptions were significantly affected by outcome and by motivational cues, with interactions between outcome x intention and outcome x effort. No significant correlations were found within conditions between evaluations and responsibility ratings, but the patterns of results for the two measures were highly similar.

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DEDICATION

To my family for their years of support and encouragement and, especially to my mother, Dorothy, for giving me confidence in my abilities, the opportunity and freedom to develop them, and the pride to use them well.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

Within the last several decades a great deal of work in psychology has been directed towards a reaffirmation that cognitive processes play an important role in determining or directing human behavior. Bolles (1974), for example notes that although psychology has always had some type of cognitive base, formalized cognitive approaches have only recently gained respect within the realm of "scientific" psychological theory. Mischel (1974) discusses an important example of the relative neglect of cognitive factors in psychological theory and research. He notes that while there has been strong theoretical significance attributed to the function of rewards, there is a blatant lack of understanding as to how cognitive representations of rewards may be involved in the regulation of complex behaviors.

Cognitive models of psychology, because of their complex properties, facilitate an understanding of the richness of human behavior. These models provide a means for analyzing the intricate mechanisms by which behavior is controlled. Cognitive theorists address the complexities of behavior by focusing on the informational or cue value of stimuli. Unlike more mechanistic approaches, cognitive theories do not define stimuli as goading the organism. Instead, stimuli are viewed as a source of information from which meaning can be extracted about the external physical world (Weiner, 1972). The task of cognitive theorists is, therefore, to provide a logical, systematic explanation of how stimulus cues are utilized and how they mediate behavioral responses.

Attribution Theory

Attribution theory is a cognitive model which is primarily concerned with the development and utilization of causal rule systems as an inherent activity of human beings. One of the basic assumptions of attribution theory is that man is motivated to gain cognitive mastery over his environment (Kelley, 1967). Within this theoretical framework, man is viewed not merely as a consumer of information but as an active processor of information. Bolles (1974), for example, proposes that each of us organizes and makes cognitive sense of information in order to make sense of ourselves and the world around us. Such organizational structures then play a mediational role in guiding or influencing behavior. Attribution theory proposes that people continually attempt to understand and control their phenomenological world by analyzing environmental cues, making inferences about the causes of events, and then responding to the world on the basis of these causal inferences (Jones & Nisbett, 1972; Kelley, 1972, 1972b; Weiner, 1974). Thus the attribution process enables one to explain, predict, and thereby control the world in which he lives by substituting stable inferred structures for observed flux (Jones & Goethals, 1972).

The principles of attribution theory could be applied to a broad spectrum of environmental events such as the examination of naive causal beliefs about chemical activity, meteorology, physics, etc. For example, Heider and Simmel (1944) examined the importance of causal ascriptions in the organization and description of apparent relationships among moving objects. However, attribution theory primarily focuses on naive <u>social</u> psychology, and examines the causal elements of interpersonal relationships (Jones, Kanouse, Nisbett, Valins & Weiner,

1972). For the most part, attribution theorists operating within the realm of social psychology develop paradigms for assessing the relationship between perceived causes of an event and the evaluative judgments about the outcome of the event (Frieze & Weiner, 1971). In addition, attribution theorists examine the processes by which an individual selects from the many cues available those cues which are believed to be relevant to the causation of the event or action, and how based on this constellation of cues, an individual reaches a functional causal judgment.

A major basis for the classification of the phenomenal causes of events by attribution theorists is Heider's (1958) system. Within this model the phenomenal causes of success and failure are conceived to be based upon the perceived activity of certain personal (internal) factors and certain environmental (external) factors, each of which may be further subdivided into either dispositional (stable) or fluctuating (unstable) factors. Specifically, Heider proposed a "naive theory" of action in which one's judgments regarding the outcome of an event are based upon the analysis of two perceived supraordinate categorical factors: power and motivation. The power factor is the stable, dispositional factor and subsumed under it are those cues pertaining to an individual's ability or to the difficulty of the task to be completed. The motivational factor encompasses the unstable, fluctuating variables and includes those cues which indicate the individual's intention to act and his expenditure of effort in the specific situation. According to Heider, all of the above factors are combined additively as an individual analyzes and responds to his social environment. Thus Heider's model for understanding social perception parallels many other cognitive

models of behavior. There is a clear analogy between this power by motivation formula and the expectancy by value formula that underlies Tolman's (1932) theory, for example.

According to attribution theory, individuals ascribe causal responsibility for an outcome to one or more specific factors to the extent that they appear to be present when the effect is present and absent when the effect is absent (Kelley, 1967). Kelley likens causal ascription to the Analysis of Variance model of statistics which examines the covariation of an effect over situations, persons, time and modalities of action. By using consensus information and consistency information, the individual gradually develops conceptions about the way in which certain kinds of causes interact to produce a specific effect. This relatively permanent relationship which the individual perceives between an observed event and its causes is referred to as a causal schema. Causal schemata enable a person to integrate and make use of information gathered from temporally and spatially distinct occasions (Kelley, 1972b). The schemata are the structural units or rule systems within which causal cognitions are organized; and, as such, they are the roots of cognitive causal mediation. That is, the schemata or belief systems give meaning to a stimulus. And, subsequent responses to the stimulus are guided by intervening structures of thought (Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1972).

In summary, attribution theory, as derived from Heider's "naive theory", is a cognitive model of behavior wherein the perceived outcome of an event serves as a stimulus, and causal schemata are the intervening cognitions which rather than defining or regulating behavioral responses, serve as structures for appraisal. The

differential allocation of causality results in different affective experiences, future expectations, and behaviors. Causal cognitions are functional in that they aid the individual in providing himself with a more predictable environment (Weiner, 1972).

Achievement: Weiner's Model

Weiner has applied Attribution Theory to achievement motivation in a two part model (Kun & Weiner, 1973; Weiner, 1972, 1974b; Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1972). The first aspect of this model involves a theory of how antecedent stimulus cues are integrated into cognitive structures, i.e. causal schemata. The second component of the model involves a theory of action and is primarily concerned with evaluating the laws or rule systems that relate thought to action.

During the initial stage of the attribution process the individual examines antecedent conditions of an event and makes inferences about its causation. According to Weiner, the perceived primary causes of an action or event, the power and motivation factors outlined by Heider, may be conceptualized within a two way classification scheme on the basis of stability and locus of control. Ability and task difficulty, the indicators of power, are considered to be relatively stable while effort, an indicator of motivation, may vary over time. Ability and effort are presumed to be internal qualities that are under the control of the person. Task difficulty, on the other hand, is an environmental factor which is externally controlled. In addition, Weiner includes luck as a causal attribute, and he defines luck as an externally controlled unstable factor.

On the basis of the causal cognitions arising from the initial

stage of the attribution process, the individual experiences affective reactions, e.g. pleasure/displeasure, pride/shame, etc., and expectancies, e.g. anticipation of success or failure. These affective reactions and expectancies are considered to serve as a link between thought and action, and thereby influence the individual's overt response to the event. However, the rules by which affective responses are linked to causal attributions are not clearly defined.

Antecedent Stimuli. According to Weiner's propositions, numerous stimuli are analyzed by an individual during the process of making causal inferences. This process is indeed a complex one in that ascriptions to causal factors are not made independently of one another or from mutually exclusive cues. Rather, many pieces of partly overlapping information are compared simultaneously in order for a functional causal judgment to be reached. This theoretical framework has been supported by empirical evidence (Frieze & Weiner, 1971; Frieze, 1976; Weiner, 1974b). A brief review of the current state of the model, is presented below.

Inferences, about ability are based upon information about an individual's performance over time. For example, subjects who consistently succeed at tasks which others tend to fail, subjects who show performance peaks, and subjects who show high initial performance are viewed as having high ability.

Inferences about one's own effort are considered to be based upon proprioceptive feedback, or introspective knowledge. Inferences about another's effort are made by analogy from self ascription, from visible evidence indicating force of exertion, from verbal confirmation, or by

the covariation of ability and difficulty with the outcome of the event. For example, an individual who performs better than would be expected for someone of his ability at a task of a particular difficulty would be considered to have expended effort.

Inferences about the difficulty of the task are seen to result from an examination of the length, complexity, and novelty of the task, or (alternatively) from normative data. Thus, a task that is long, complex or novel is generally considered more difficult that one that is short, simple, or similar to other tasks. In addition, a task which most people fail is considered difficult whereas one that most people pass is considered to be easy.

Attributions to luck are considered as being derived from apparent randomness of outcome, independence of antecedents and consequences, or disconfirmation of expected outcome. That is, if everything known about an individual in a given situation would lead one to expect a failure but the individual succeeds, the outcome may be considered to be the result of good luck. Conversely, failure in a situation that has an expectancy of success can be considered the result of bad luck.

There are several points which do not fit neatly into Weiner's two way classification, thus indicating a need for further development of the model. For example, Frieze (1976) found that although task difficulty, ability, and effort were among the most frequently cited categories for explaining the results of an achievement related event, they were not used exclusively. A category of incentive or task importance was also found among the more frequent explanations. In addition, Frieze found a sub-class of causal categories such as mood, health, and home environment that were employed only as excuses for failure when

success had been expected. There is an obvious need to examine a broader variety of causal cue categories. There is also a need to specify the covariation of such cues which leads to inferences of responsibility and causality.

Consequences of Causal Attribution for One's Own Behavior

The general premise that causal inferences mediate an individual's interpretation of his own behavior and subsequent responses to environmental events has been supported by a variety of empirical studies (e.g. Schacter & Singer, 1962; Lazarus, 1966; Valins, 1966; Nisbett & Valins, 1972). The attribution model proposed by Weiner suggests some specific ways in which the causal cognitions guide the manner in which an individual views and responds to the world around him and to his own role in events. When an outcome or event is attributed to stable factors such as ability or task difficulty the individual will come to expect a similar outcome in the future. Conversely, when an outcome or event is attributed to fluctuating cues such as effort or luck future outcome may be expected to differ (McMahan, 1973; Weiner, 1974c). Weiner (1974c) also suggests that attribution of outcome to internal factors of ability or effort will influence the individual's beliefs about whether the actor (including himself) was in control of or responsible for the outcome. In such a case the causal attribution would affect the individual's sense of pride or shame and would significantly affect the individual's affective reactions to the outcome or his evaluation of it. On the other hand, a success or failure that is based upon external environmental factors is outside of the person's control (Cook, 1970; Weiner & Kukla, 1970; Weiner & Sierad, 1973).

Thus, according to Weiner's model, it is the intervening constructs of causal responsibility and expectancy which actively link attributions of causality and evaluations of an event.

Causal Attribution and Evaluative Judgments of Others

In addressing the link between thought and action, attribution theorists suggest that causal ascriptions not only influence how the individual interprets his own behavior, but also influence how the individual perceives, organizes and responds to the behavior of others. Just as in the case of self analysis, an observor engaged in the analysis of others will search the environment for cues that can shed light upon the reasons why an event occurred.

Heider (1958), the seminal theorist in this domain, hypothesizes that in a "naive analysis of action" (i.e. a layman trying to determine the causes of an event) outcome is perceived to be a function of the effective personal forces and the effective environmental forces. The individual observor must therefore gather information about both the actor and the environment as related to what Heider calls the power and motivation facets of the event. Heider notes that both power ("can") and motivation ("try") are inherent in the perception of every human action. He suggests that the task of the observor or the evaluator is to determine the valence and magnitude of each of these factors in order to reach a functional causal judgment and to make an evaluative judgment about the acceptability of the event.

In making decisions about the power factor, the individual must determine whether, and to what degree, the event could be accomplished

or avoided, as the situation requires. In order to do this, the individual would have to take into account such cues as the inherent ability of the actor (.e.g intellectual capability), the actor's availability to perform (e.g. whether he was in the vicinity), and the nature of the task (e.g. whether it was humanly possible to accomplish). In making decisions about the motivation factor, the observor must determine the valence and intensity of the actor's intent and effort. That is, the observor must assess the value which the individual places on performance (e.g. whether he wanted to perform the particular action) and the force of action (e.g. how hard he tried to accomplish the task).

Most of the subsequent empirical work on attribution processes and their relation to evaluative judgments have incorporated components of Heider's power factor and motivational factor; but, these studies have neglected to include or clearly represent all of the major aspects of Heider's system, and this has left noticeable gaps in our understanding of these phenomena.

Of the two components in Heider's system, the power factor has been the more completely analyzed. Studies have examined the effects of an actor's ability and the effects of varying degrees of task difficulty (Frieze & Weiner, 1971; Kukla, 1972; Kun & Weiner, 1973; Weiner & Kukla, 1970; Weiner & Peter, 1973). The results of these experiments show interesting but conflicting effects of the ability variable. In some instances low ability appeared to heighten positive evaluations for success while diminishing negative evaluation for failure, while in other cases low ability acted to merely reduce the range of feedback given, diminishing both reward and punishment. Rest, Nierenberg, Weiner, and Heckhausen (1973) sought to clear up the discrepancies in

the ability data. The results of their investigation suggested that there is a difference between the informational cues presented by the experimenter and their interpretation by the subject. For example, ability did not produce a significant effect of its own but instead interacted with effort information. Reported levels of effort were perceived differently when in combination with varying levels of reported ability and varying outcome. That is, an observor may discount or alter information presented because of a contrast set up on the basis of the covarying cues. As a result, a low ability person described as putting forth high effort may be considered by the observor as having expended more effort than his high ability high effort counterpart. Thus, the observor may believe that the low ability student who succeeds must be trying harder than the high ability student who succeeds at the same task, even though the message contains no indication of this. For this reason, care must be taken to control compensatory motivational attributions that are fostered by the within subjects experimental design typically employed in this research.

Although there are some difficulties in the manner in which the power factor has been examined in previous research, it has been more completely addressed than its companion factor, motivation. Weiner (1974) discussed both the importance and the relative neglect of motivational variables in several areas of psychological research, and noted that psychology has tended to focus on the measurement of ability to perform in school situations while ignoring the more subjective determinants of achievement. Specifically, Weiner was referring to the thrust toward academic readiness programs and the trend toward fostering intellectual growth rather than enhancing a positive motivational

orientation in young children, but his points can be applied to basic research as well as to educational applications.

Although Weiner was concerned about the relative neglect of motivational factors, he too has fallen into the trap of putting motivational aspects of behavior into a somewhat secondary position. For example, while he acknowledged suggestions by Rosenbaum (1972) that intentionality may be an important dimension of causal attribution, he indicated that the complexities arising from the incorporation of this dimension into the attribution model may be too difficult to assimilate (Weiner, 1974b). Weiner has included consideration of motivation in terms of effort in his model but has consistently shied away from an analysis of intent. This avoidance of intent as a stimulus cue in causal attribution and evaluative judgments is clearly apparent in his summaries of Heider's model. Heider (1958) wrote at length about the role of intentionality cues in the "naive analysis of action" yet Weiner stated that Heider's model stresses the importance of only ability, effort, task difficulty, and luck.

Ryan (1970) pointed out that intention is a generally neglected concept throughout contemporary theories of motivation and is considered, for the most part, to be of questionable legitimacy. It is therefore understandable that intention has also been ignored by attribution theorists. It appears that one of the problems with the concept of intention is its intangibility. Unlike muscular movements or a force of exertion, it is difficult to measure and perhaps unable to be observed easily. Bolles (1974) notes that although we can recognize motives in the behavior of others, this perception of motive is subtle and we rarely talk explicitly about it. Intentionality is difficult to pin

down because it seems to be totally internal to the individual possessing it. However, the fact that intention is difficult to circumscribe should not negate its existence and its potential effect. As Ryan (1970) noted, "... values, motives, intentions, images, or other 'mental events' are events in the same organism in which we measure neural activity... both kinds of events are indicators of the total activity of the single organism.(p.12)"

The concept of intention has been excluded from psychological theories because it is suspect in the sense of being subjective, or non-scientific. However, the average individual seems to accept as fact the conception that human beings are indeed affected by their plans, their intentions, and their goals. For this reason, the inclusion of the concept of intentionality seems quite appropriate within attribution theory, because of its cognitive focus; and it appears to be a necessary component of the investigation of the way in which the average individual responds to inferences about the plans or goals of others. Ryan reminds us that although it is possible to construct theories which deny the legitimacy of intention, it is also possible to construct theories that make use of the concept. While it may be difficult to completely or adequately pinpoint the operation of intentionality factors in causal attribution and evaluative judgments, it is indeed empirically justified that work be initiated in this area. An examination of several of the major studies can clearly illustrate this point.

For example, Lanzetta and Hannah (1969) completely excluded the motivational factor from the independent variables of their research on the consequences of causal ascription on overt behavior and instead merely assumed that subjects were making a motivational inference on

the basis of the resultant evaluations of ability and outcome cues. In this study subjects were given the task of training a fellow student on a concept formation task. The trainee was a confederate whose performance was predetermined and identical for all trainers. In addition to general instructions, each trainer was provided with information both about the alleged competence of the trainee and the difficulty of the task. The trainer could operate one of five switches which were labeled "high shock", "low shock", "neutral", "low reward", and "high reward" to provide feedback to the trainee. The results showed that both task difficulty and subject competence significantly affected the type and level of feedback. Rewards were given for success and punishment for failure. Punishment was greater for failure at an easy task than for failure at a difficult task, with high ability trainees receiving more punishment than low ability trainees. Lanzetta and Hannah suggested that poor performance of the trainee was frustrating to the trainer, but that the response to frustration was dependent upon the perceived cause of the failure. That is, failure by incompetent subjects on difficult tasks was probably attributed to stable factors over which the trainee had no control and therefore resulted in low levels of punishment. However, when a competent learner failed, especially at an easy task, the facts of the situation could not account for the poor performance. Such failures appeared to be attributed to motivational factors and considered to be intentional failures, thereby resulting in maximum punishment. This study suggested that motivation significantly affected evaluative judgment and feedback, but this hypothesis could not be tested within the design.

Weiner and Kukla (1970) criticized the Lanzetta and Hannah study

for not directly manipulating the motivational component and attempted to correct this flaw by specifying for their subjects the relative amount of effort expended by the hypothetical student in their stimulus stories. The intention factor was, however, omitted from this analysis. Subjects were given information regarding the ability (high or low), effort (high or low), and exam performance (excellent, fair, borderline, moderate failure, or clear failure) of hypothetical students; and, they were then asked to give feedback in the form of 1 to 5 gold stars for reward or 1 to 5 red stars for punishment. The results showed that outcome was a significant effect, i.e. good exam performance was rewarded while poor performance was punished and also that effort attributions differentially affected feedback, i.e. students who expended effort were rewarded more and punished less than those who had not.

Weiner and Peter (1973) included both of Heider's components of the motivational factor in their developmental study but oversimplified Heider's analysis by treating effort and intention as essentially parallel. Although both effort and intention were viewed as motivational components, effort was considered to be operative only in an achievement situation and intent was included only in a moral situation. In this study, Weiner and Peter examined the determinants of evaluative judgments of success and failure and compared these with the developmental sequence of such judgments observed within a moral situation. Three hundred children between the ages of 4 and 18 were asked to make evaluative judgments of the actors in sixteen brief stories. Eight stories were based upon an achievement related situation (solving a puzzle task in school) and eight were based on a moral situation (a

version of the Piagetian lost child theme). Within each of the situations the stories differed with regard to the ability of the person being judged, the objective outcome or consequence of the action, and the effort in the achievement situation or the intent in the moral situation. Subjects were required to provide feedback about the individual in the story by dispensing reward or punishment with gold stars or red stars, as in the Weiner and Kukla (1970) study.

The results of this study showed that subjects systematically used the cues of ability, effort, and outcome when evaluating achievement related stories. The cues of ability, intent, and outcome were used when analyzing moral stories. Highly significant age trends were also reported. Subjective cues of effort and intent were found to replace objective outcome cues as the main determinant of judgment for older children in both the achievement and moral context. However, objective outcome re-emerged as the most important determinant of the evaluation of achievement stories after the age of twelve. The researchers also reported that more rewards were associated with achievement behaviors while greater punishments were associated with moral behaviors.

Although Weiner and Peter did not systematically separate the relative importance of the two aspects of motivation (intent and effort) within the same situation, the results of this study lend some support to the hypothesis that these two factors operate in different ways in the attribution/evaluation process. Positive moral intent was rewarded more highly than was positive effort, while negative moral intent was punished more harshly than was lack of effort. A clear interpretation of this study is made especially difficult, however, because the two

situations (moral and achievement) had differential outcome consequences. That is, in the school achievement situation the outcome of the event only affected the child performing the task; whereas, the actions of the child in the moral story had consequences for another individual as well. In order to make more meaningful comparisons between the effects of effort and the effects of intent on evaluative judgments, both situational factors and outcome effects would have to be controlled in a more systematic manner.

Weiner and Peter attempted to justify their experimental design and the subsequent confounding of motivational and situational effects by using the empirical differences to suggest that there are two separate motive systems operating, one in achievement situations and one in moral situations. Parsons (1974), however, presented theoretical and empirical grounds for suggesting that the distinction between moral and achievement motive systems is unclear and perhaps arbitrary. First of all, regardless of how experimenters differentially label the two types of stories, the actual task of an evaluator remains relatively constant despite the content of the story. Whether the evaluator is judging a child's performance in school, his behavior on the playground, or his obedience of parental or societal rules, the attribution and evaluation process may be quite similar. That is, the evaluator must determine the causal responsibility of the actor for the outcome and provide the actor with an observable evaluative reaction to the incident. Second, the classes of cue utilized for evaluative purposes across the two motive systems are similar. That is, in either a moral or an achievement situation, the evaluator assesses the power and motivation components of the act. The actor's ability, intention, and effort are

analyzed in relation to the outcome, and a functional causal judgment is reached. The importance of ability, motivation, and outcome cues has been documented both in studies of achievement assessment (Eswara, 1972; Lanzetta & Hannah, 1969; Rest, Nierenberg, Weiner & Heckhausen, 1973; Weiner & Kukla, 1970; Weiner & Peter, 1973) and in studies of moral reasoning (Bandura & Mc Donald, 1963; Buchanan & Thompson, 1973; Costanzo, Coie, Grumet & Farnill, 1973).

Kelley (1972) pointed out that the process of evaluation, whatever the content, involves both achievement and moral belief systems. That is, whether the evaluator is assessing school performance or social behavior, the resultant evaluative judgments stem from the evaluator's analysis of the actor's ability, the environmental constraints or task difficulty, and the evaluator's beliefs about good vs. bad, right vs. wrong, moral vs. immoral, laudable vs. reprehensible. Since there is little if any clear basis for a distinction between motive systems, the differential use of intent cues and effort cues in moral and achievement stories by Weiner and Peter (1973) is questionable.

Differential Effects of Intention Cues and Effort Cues

One of the major questions that has been neglected in the previously mentioned research involves an investigation of the differential effects of intention cues and effort cues on causal attribution, assignment of causal responsibility, and subsequent evaluative judgments. Such an investigation is one of the primary purposes of the present research endeavors. Before proceeding with an examination

of the differences in the effects of these two types of cues, however, it is important to evaluate whether and in what ways the informational value of intention cues may differ from that of effort cues. It is only with some understanding of the differences between the cues that one can begin to explain any differential effects that might exist.

Beyond the superficial differences of the words themselves, intention cues and effort cues may provide an observer or an evaluator with different types of information to be used in the interpretation of and evaluation of a particular event. Heider (1958), for example, states that information about intention, i.e., what an actor wants to do, gives an action its purposive or goal-directed character. According to Heider's conceptualization effort, on the other hand, merely denotes a force or degree of exertion. From this perspective, one can conceive of many situations where intention and effort are complementary. Such a case would be when an actor's intention to perform an action was accompanied by a degree of effort or force that facilitated the occurrence of the action. Another case would be when an actor's intention not to perform or to prevent an action was accompanied by insufficient effort to accomplish the action or by sufficient effort to counter other forces and thus prevent the occurrence of the action. From Heider's perspective, however, one can also conceive of situations where intention and effort are conflicting. Such cases would include those in which a particular action was not intended but was accomplished with considerable accidental force or exertion. Likewise an action or an event that is intended may not be supported by sufficient force to facilitate its successful completion, because of momentary influences that prevent it.

The distinction between effort and intention, as Heider described it, is sometimes difficult to maintain. For example, Weiner and Peter (1973) confounded their effort variable by including an implication about intent. That is, when specifying the level of effort expended by the child in their stimulus stories of an achievement situation, Weiner and Peter indicated that the child had or had not "tried" to do the task. This use of the word "try" not only implies a degree of effort expenditure or exertion, but also draws the evaluator to inferences about intent. That is, the word "try" connotes directionality or valence as well as observable force of the behavior in question. The authors' conclusions that the achievement evaluation process appears to be more complex than the moral evaluation process may in fact rest on the confounding of intent and effort cues ("try") in the achievement related stories in contrast to the clear specification of only intent ("want to") in the moral stories.

Ryan (1970) proposes another way of conceptualizing intention as a construct that differs from but is related to effort. Intentionality may be defined as that aspect of behavior which suggests that actor's plan of operation and which essentially unites discrete units of behavior into a more complex event. This conception of intent as the cement that holds pieces of behavior together would help to illustrate why the concept has suffered such neglect in psychology. As several analysts have noted, most contemporary psychological research focuses on single isolated events and does not evaluate the continuity of the stream of behavior (Birch, Atkinson & Bongort, 1974; Lazarus, 1974; Kuo, 1967). Viewed in this way, intention refers to the <u>identification</u> of the category of goal state toward which the individual is oriented

and which organizes a behavioral sequence. Intention might not be necessary to explain discrete bits of behavior but it would be necessary to understand complex consequences and preparations made by the individual for them. Within this framework, effort could be viewed as one of the behavioral effects of intention rather than as completely distinct from it.

Thus, intention cues and effort cues may indeed provide an observor with distinct or complementary information regarding the motivational aspects of any given event or action. According to attribution theory, the information once received has an effect upon the causal schemata or causal cognitions of the observor. These schemata then guide the observor's evaluation of the response to the individual observed and to the results of the action or event. A question that remains is whether the different information derived from intention cues and effort cues would have differential effects on the causal schemata, and in this way differentially affect the evaluation of and response to the actor and the result of the action or event.

According to Heider (1958), the primary importance of intention cues rests in the influence that they exert upon the assignment of personal causal responsibility. Heider indicates that such inferences about personal causal responsibility are extremely important for the evaluation of and response to an event in that personal causal responsibility has serious implications for future events. That is, there are different implications for intentional as opposed to accidental actions despite any similarity in their force or effort. Specifically, intentional acts may be considered to reflect a stable characteristic of the actor's value system and can, therefore, be expected to be repeated.

Conversely, unintentional or accidental events will not necessarily recur. Since effort cues are said to merely describe the force of action, they should not directly influence interpretations of personal causal responsibility or affect expectancies for future events. Instead, effort cues may serve to circumscribe intentionality cues and either validate or modify them. For example, if an observer made the inference that an individual was very intent on performing a task but then saw very little effort expended by the individual, the observer would be less certain that the inference about intent was correct. Conversely, if an observer inferred a lack of intent but witnessed a considerable degree of effort, the observer would question the intention inference. Only when the observed effort was commensurate with the inferred intent could the observer be more certain of the inference. Thus, it can be suggested that within the framework of Heider's proposal intention cues would be expected to alter the quality of the evaluation such as pleasure vs. displeasure. Effort cues would not be expected to effect the assignment of responsibility and thus would not be expected to effect the quality of the judgment. However, since they may alter the observer's certainty about intent, they would be expected to alter the degree of the evaluation such as how pleased or how displeased the observer felt.

Bolles (1962) in discussing the scientific status of "will" or intent to action notes that intentionality as an inferred construct regarding others' actions is designed to maintain moral control by allowing for the societal assignment of blame and perhaps the self-assignment of guilt. In this light perceived intention is conceptualized in a similar manner as that proposed by Heider. That is, the inference

of intention is intimately connected with the ascription of personal causal responsibility. As with Heider's system, Bolles considers effort to have only an indirect relationship with ascribed responsibility for causation.

According to Ryan's (1970) conception, the plan of action (intention) explains the force of action (effort). That is, intention links segments of effort together in a meaningful way. While Heider's system (1958) suggests that effort circumscribes intent and brings certainty to it, Ryan's system (1970) would suggest that decisions about causal responsibility and about the evaluation of an event are based upon observations of effort and that such observations are made more meaningful by inferences of intent. An analysis of intention would serve to either validate or negate the purpose of the effort. Thus it may be that effort that does not conform to the actor's intentions would be discounted whereas effort that does conform to the actor's intentions would be assessed.

Because the concept of intentionality does not find a place in many theories of psychology, there has been little empirical work done in the investigation of intention. As a result there are many types of questions which must be addressed before the significance of the construct can be understood. Ryan (1970) outlines a number of levels at which the study of intention is required. These include: 1) determining tendency, or how intention influences behavior; 2) formation, or how intentions come to be a part of the individual's phenomenology; 3) determination, or how intention plays a part in the individual's perception of the external world; and, 4) development, or how the individual comes to have a repertoire of intentions. While research at each level

of Ryan's taxonomy is necessary in order to develop a more complete understanding of the concept of intention, the area which has the most relevance for the continued development of Weiner's achievement model of causal attribution is that of whether perception of intention affects an individual's perception of the world and the individual's behavior, including the individual's evaluation of and response to the behavior of others. Such is the focus of the present study.

Summary

There has been a great deal of research recently on causal attribution processes and their relationship to evaluation of scholastic achievement (Eswara, 1972; Parsons, 1974; Rest, Nierenberg, Weiner & Heckhausen, 1973; Silverstein, 1977; Weiner, 1974b; Zander, Fuller, & Armstrong, 1972). This research suggests that causal attributions significantly affect an individual's interpretation of and reactions to the achievement behavior of himself and others (Kelley, 1972; Weiner, 1974b). In addition, there are indications that attribution processes have important implications for educationally relevant questions (Weiner, 1974d; Weiner & Peter, 1973). Weiner (1974d) notes that causal attributions seem to influence whether an individual will make attempts to achieve, how intensely the individual will work at a particular task, how likely that individual will be to persist at a task after an initial failure, and how the individual will feel about himself after completion of the task. It has also been suggested that attributions influence the reward and punishment which teachers dispense to their students, thereby affecting the learning of children in school. Thus knowledge in this field has significance for those involved with the education of children.

Most of the studies using an attribution theory framework to study achievement evaluation have incorporated components of Heider's (1958) power factor and motivation factor; but these studies have neglected to include, or to clearly represent all of the aspects of Heider's system. Weiner and Peter (1973) did include both components of the motivational factor in their developmental study but oversimplified Heider's analysis by treating effort and intention as essentially equivalent. Such incomplete analysis of these two aspects of motivation presents significant problems in interpreting these studies. Discussions of the results of studies in this area suggest that causal attributions influence the rewards and punishments which teachers dispense to their students through a link between the attribution and the judgment that is mediated by an ascription of causal responsibility. The relationships between both causal ascription and evaluative judgment to the antecedent cues of effort and intention as well as to the various types of outcome must be compared; and, the covariation between assignment of responsibility (i.e., causal attribution) and evaluation of action must be examined carefully within a single study.

The present study examines the effects of intention cues and effort cues on both attribution of responsibility and on the evaluation of achievement. The theoretical basis of the attributional model emphasizes the importance of both of these cues. Since the empirical evidence suggests the possibility that these two types of cues have unique effects upon the evaluation of performance, the role of each cue was systematically analyzed. The theoretical basis of the attribution model also hypothesizes a direct link between attribution of responsibility and evaluation. In order to evaluate this link, the relationship

between ascriptions of responsibility and evaluative judgments was assessed.

As noted previously, research by Rest, Nierenberg, Weiner & Heckhausen (1973) suggested that reported levels of effort are perceived differently when in combination with varying reported levels of ability. Since the motivational variables are of primary importance in the present investigation it was determined that compensatory effort attributions and their possible confounding effects would need to be controlled. Therefore, the ability of the actor to be judged is held at an average level.

Outcome consequences were also investigated. It is frequently assumed that when an outcome involves another's welfare, praise and blame will be intensified. After all, to perform an action for one's own success is expected, but to perform one for someone else's benefit is socially commendable. Conversely, to be the cause of one's own failure is evaluated poorly, but to cause someone else's failure is socially deplorable. Weiner and Peter (1973) suggested that different motive systems and attributional systems were at work in their study when differences were found between achievement and moral situations. However, motivational cues were nested within situational contexts as were locus of outcome consequences (Silverstein, 1977). Therefore, in the present study, the effects of outcome consequences to the actor alone versus outcome consequences to other individuals as well as to the actor were examined within the context of a single type of academic situation. With the addition of the preceding constraints, the experimental paradigm designed by Weiner and Kukla (1970) and utilized successfully by other researchers in the field (Parsons, 1974;

Silverstein, 1977; Weiner & Peter, 1973) was employed, with stimulus stories constructed in the manner used by Weiner and his associates.

Because of the implications for the education process and because of the necessity for generalizability to real school settings, this study was conducted with actual public school teachers. Previous research by Silverstein (1977) has indicated that teachers' evaluative judgments are affected by the grade level at which the teacher has been working. That is, elementary school teachers as a group differ significantly from junior high or high school teachers in the importance they place on the various causal cues when making an evaluation of a student. In order to control this effect, grade level of the teachers employed in this study has been held constant. Upper level elementary school teachers were selected because of several characteristics related to students in these grades, to classroom structure, and to curriculum. That is, at this grade level, students are capable of understanding and utilizing information about their own or others' motivation, classrooms can be alternately structured for individual and group activities, the curriculum lends itself to instruction through individual or group projects, and teachers are typically concerned with development of social skills as well as acquisition of content area information. These aspects were considered to be important in order to ensure that the situations presented in the stimulus stories would be consonant with the actual experience of the subjects.

Subjects were presented stories in which the following variables were manipulated: 1) locus of consequence (individual, group); 2) intention (much more intent than, about as intent as, much less intent than other children in the class); 3) effort (much more effort than, as

much effort as, much less effort than other students in the class); 4) outcome (pass, fail). Subjects were asked to make evaluative judgments of the students in the stories and also to make ascriptions of responsibility of the students for the outcome. Half of the subjects made evaluations of the stories then made ascriptions of responsibility; and, half of the subjects made ascriptions of responsibility prior to making evaluative judgments. The materials, and procedure are presented in greater detail in the following chapter.

Statement of Hypotheses

I. Evaluative Judgments:

A. Evaluative judgments of events will be significantly affected by the outcome of the event. More positive evaluations will be made for success at a task than for failure at a task.

B. Evaluative judgments of events will be significantly affected by the situational variable, locus of outcome consequence. Positive evaluations for success and negative evaluations for failure will be enhanced when effects are to another as well as to the actor.

C. Evaluative judgments will be significantly affected differentially by the specified motivational causal cues.

1. Intention cues will significantly affect evaluative judgments of the students in the stories. More positive evaluations will be made for positive intention than for neutral or negative intention, and more positive evaluations will be made for neutral than negative intention regarding performance of the task.

2. Effort cues will significantly affect evaluative judgments of the students in the stories. More positive evaluations will be made for above average effort than for average or below average effort, and more positive evaluations will be made for average than below average effort.

3. Interactions between intention and other experimental variables will differ for those of effort and the other experimental variables.

4. Intention and effort cues will interact. Statements of intent will be evaluated differently at the three levels of effort; statements of effort will be evaluated differently at the three levels of intent.

5. Specifically, intention and effort cues will combine such that the most positive evaluations will be made for those events where the individual was above average on both intention and effort, while the least positive evaluations will be made for those events where the individual was below average on both intention and effort.

II. Ascriptions of Responsibility:

A. Ascription of responsibility will not be altered significantly by the outcome of the event.

B. Ascription of responsibility will be affected significantly by the specified motivational causal cues.

1. Based upon Heider's system it would be expected that

attributions of responsibility would be affected significantly by intention cues but not by effort cues.

2. Based upon Ryan's conceptualization it would be expected that attributions of responsibility would be significantly affected by both intention cues and effort cues.

III. Relationship Between Evaluative Judgments and Attributions of Responsibility:

Evaluative judgments regarding the outcome of events will be based upon intervening attributions of responsibility.

1. The most extreme levels of evaluation, both positive and negative, will be dispensed when personal causal responsibility is attributed to the individual being judged.

2. The smallest levels of evaluation, both positive and negative, will be dispensed when personal causal responsibility is not attributed to the individual being judged.

II. METHOD

Subjects

Seventy-two elementary school teachers of grades three through six, inclusive, served as subjects in this study. Subjects were volunteers recruited from five cooperating school districts in Rhode Island (Pawtucket, South Kingstown, Warwick) and Massachusetts (Attleboro, Taunton) through the assistance of building principals or school psychologists. Of the seventy-two, twenty were third grade teachers, twenty were fourth grade teachers, sixteen were fifth grade teachers, and sixteen were sixth grade teachers. The school buildings from which teachers were selected served children of working class through upper middle class populations in suburban, and semi-rural areas.

Teachers from each grade and from each school building were systematically assigned across four between subject groups to ensure such that neither grade levels nor schools were nested within any treatment condition and that all grades and schools were represented in each condition.

Fifty-six subjects were females and sixteen were males. The range of teaching experience was from one through thirty-three years according to the following distribution: two were in their first year of teaching, twenty-two had from two through five years of experience, thirty had from six through ten years of experience, ten had from eleven through fifteen years of experience, and eight had sixteen or more years of experience. The sample, therefore, appears to be representative of the general teaching population. The only bias involved would be that

of willingness to volunteer for a study such as this.

Materials

Thirty-six stimulus stories were constructed in a manner consistent with previous research. Stories varied only minimally according to the classes of informational cue variables being manipulated. The salient experimental cues were presented concisely within the context of a school related activity.

In each story a student was described as a child who was generally capable of an average level of achievement, therefore capable of completing the task of gathering information about a specific topic and writing a report within a time period of three weeks. The experimental variable cues were then presented.

Stories varied on two motivational causal cue dimensions; 1) the child's intent to perform the task as inferred from statements the child had made to the teacher and other students (much more intent than-, about as much intent as-, or much less intent than most of the other students in the class); and, 2) the child's effort in terms of the amount of time spent gathering information and writing the paper (much more effort than-, as much effort as-, or much less effort than most of the other students in the class). Two levels of outcome (pass or fail) were used. One situational variable, locus of consequence, was manipulated. The two levels of this variable were: 1) an incident in which only the actor himself was affected by the performance, i.e., if the child passed he/she could go on a class trip but if the child failed he/she would forfeit the trip; and, 2) an incident in which other children were affected by the actor's performance, i.e. if the child

passed he/she and his classmates could go on the trip but if anyone failed the trip would be postponed. These dimensions (3 levels of intention x 3 levels of effort x 2 levels of outcome x 2 levels of situation) were crossed factorially resulting in thirty-six different stories. Each subject received either all individual stories or all group stories. The order of cue presentation was held constant throughout all stories.

Common male and female names of one or two syllables, and without particular ethnic connotation were selected to identify the children in the stories. The sex of the child in each story of situation 1 was randomly determined and an appropriate name was then assigned to the story. The same name was then used for the companion story of situation 2.

The stories were each printed on a separate piece of 8 1/2 x 11" paper and were presented to the subjects in booklet form. Half of the booklets contained all eighteen stories with the outcome affecting only the individual actor (I). Half of the booklets contained all eighteen stories with the outcome affecting a group of other students as well as the actor (G). All booklets contained a cover sheet for recording subject information and for providing a brief introduction to the task. A detailed scenario provided the instructional context of the project task assigned to the class and the particular consequences of success and failure either for the actor alone or for the actor and others. Each booklet contained two distinct sets of eighteen individual stories or two distinct types of group stories in order that two types of responses could be gathered. For each booklet and within each set, stories were arranged in a different random order.

Specific directions regarding responses were provided at the beginning of each set of stories. Teachers were asked to make an evaluative judgment about the students in one of the sets of stories. They were asked to respond as they would to actual students in their classes; and, they were asked to indicate their reaction to the actor's behavior by circling only one choice on an eleven point scale ranging from -5 through 0 to +5 presented horizontally beneath the story. Pluses indicated that they were pleased with the child's behavior and minuses indicated that they were displeased. For the other set of stories, the teachers were asked to assess the degree to which the child was personally responsible for the event. They were asked to respond as they would to actual students in their classes; and to indicate their reaction to the child by circling one of five alternative choices ranging from no responsibility to complete responsibility for the event. Half of the booklets required teachers to make evaluative judgments of the eighteen stories then to make decisions of responsibility for the eighteen stories (E:R); and, the other half of the booklets required teachers to make decisions of responsibility for the eighteen stories then to make evaluative judgments (R:E).

In summary, the materials reflected two between subject factors: locus of consequence (Individual, Group) and order of presentation (E:R, R:E). Thus, there were four types of booklets: IER, IRE, GER, GRE. There were three within subject variables incorporated into the eighteen stimulus stories: intent (above average, average, below average), effort (above average, average, below average), and outcome (pass, fail). Each subject was asked to make an evaluative judgment of the actor in a set of eighteen stories and to judge the child's responsi-

bility in another set of eighteen stories.

Procedure

Volunteers were recruited from elementary schools by principals or school psychologists. Teachers were told that this study was an investigation of how teachers evaluate their students, that their time and assistance would be sincerely appreciated, and that anonymity of their responses would be ensured.

A booklet of stimulus stories and a plain manila envelope was then given to each volunteer teacher. Booklets were distributed systematically so that subjects from each building and at the various grade levels were assigned across the four between subject conditions. Teachers were asked to complete the booklet on their own time without collaborating with other volunteers, to enclose the booklet in the envelope provided and return it to the designated place in the school building within one week. Booklets were then returned to the experimenter.

Data were collected during three academic semesters from January 1978 until June 1979.

III. RESULTS

This study involved two separate dependent measures: evaluative judgments and ascriptions of responsibility. These two dependent measures were analyzed separately using a five way analysis of variance design (2x2x3x3x2) with each of the following factors: a) situational effect (individual, group), b) order (Evaluation-Responsibility, Responsibility-Evaluation), c) intent (above average, average, below average), d) effort (above average, average, below average), e) outcome (pass, fail). Subjects were nested within situational effects and order, with repeated measures across the remaining three factors. In addition, the relationship between the evaluative judgment of a story and the ascription of responsibility for that story was examined by means of Pearson correlation coefficients computed separately for each of the eighteen stories in both the individual and the group situations. The relationship between a subject's tendency to give an extreme evaluation was examined by means of rank order correlation coefficients computed separately for the four between subject conditions.

Because of the number and complexity of the statistical tests employed in this study the results will be presented in the following order: first, all of the results of the analysis of variance for evaluative judgments; second, all of the results for the analysis of variance for ascriptions of responsibility; and finally, all of the results of the correlation between the two dependent measures.

ANOVA: Evaluative Judgments

The five way analysis of variance (2x2x3x3x2) resulted in 72 separate cells each containing 18 observations. Means and standard deviations for each of the 72 cells of this analysis of evaluative judgment responses are presented in Table 1. Order, designated E:R or R:E, indicates the manner in which subjects provided their responses to the stimulus stories. Order E:R designates the group of subjects who first made evaluative judgments and then determined the responsibility of the actors in the stories, while order R:E represents the opposite order of presentation. In this study the condition represented in each story will be specified by a three digit number sequence where the first number designates intention (1 = much more intent (above average), 2 = about as intent (average), 3 = much less intent (below average)), the second number designates effort (1 = much more effort (above average), 2 = about as much effort (average), 3 = much less effort (below average)), and the third number designates outcome (1 = pass, 2 = fail).

Table 2 summarizes the results of the overall analysis of variance of evaluative judgments. The alpha level was set at $p<.05$ for all analyses involving the between subject factors, situation and order. Because of the sensitivity of the within subjects design, the alpha level was set at $p<.01$ for those factors involving repeated measures. Significant differences were found for the following main effects: a) intention, $F(2,136) = 18.11$, $p<.01$; b) effort, $F(2,136) = 190.11$, $p<.01$; and c) outcome, $F(1,68) = 187.11$, $p<.01$. Three of the two-way interactions were significant: a) intent x outcome, $F(2,136) = 14.78$, $p<.01$; b) effort x outcome, $F(2,136) = 6.45$, $p<.01$; and, c) effort x order, $F(2,136) = 4.72$, $p<.01$. None of the three-way, four-way or five-way

TABLE 1

Means and Standard Deviations for Evaluative Judgments for Situation, Order, and Three Conditions (Intent, Effort, Outcome)

Part 1. Individual Situation

	Order			
Condition	E:R		R:E	
IEO	$\bar{X}$	sd	$\bar{X}$	sd
111	4.6111	.778	4.5000	.707
112	- .6667	2.401	.7778	2.647
121	3.3889	1.461	2.7222	1.320
122	-1.1111	2.083	.2778	1.934
131	.7222	2.421	.3889	1.852
132	-2.2222	2.290	-2.4444	1.789
211	4.0000	.840	3.2222	1.768
212	- .7778	2.691	.9444	2.711
221	2.2222	1.263	1.7222	1.274
222	-1.3889	2.004	- .4444	1.423
231	.5000	2.503	- .3333	1.879
232	-2.1111	2.423	-2.4444	1.338
311	3.2222	1.987	3.0556	2.363
312	- .1111	2.632	1.0556	2.980
321	2.6111	1.614	2.0000	1.847
322	-1.1111	2.083	- .1667	2.203
331	.1667	2.479	-1.1667	2.093
332	-1.6667	2.657	-2.8333	1.791

TABLE 1 - Continued

Part 2. Group Situation

	Order			
Condition	E:R		R:E	
IEO	$\bar{X}$	sd	$\bar{X}$	sd
111	4.7778	.548	4.7222	.575
112	- .5556	2.975	.7778	3.300
121	3.0556	1.259	3.0000	1.782
122	- .6667	2.401	- .4444	2.382
131	.7222	1.487	.6111	2.173
132	-2.6111	1.501	-2.7778	2.045
211	3.8333	1.425	3.6667	2.326
212	- .4444	2.975	- .2222	3.210
221	2.2778	1.320	2.7222	2.137
222	-1.1667	2.093	- .6111	2.356
231	1.0000	1.815	- .1667	2.035
232	-2.1111	2.026	-2.7222	2.081
311	3.1111	2.349	3.3333	1.645
312	- .6667	2.970	- .2222	2.439
321	2.2778	1.274	2.0556	2.508
322	-1.5556	2.255	-1.1111	2.193
331	- .3333	2.275	.2222	2.625
332	-3.2222	1.700	-3.0556	2.209

TABLE 2

ANOVA Summary Table for Evaluative Judgments

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Situation (S)	5.316	1	5.316	.29
Order (Or)	3.260	1	3.260	.18
SxOr	1.563	1	1.563	.09
error Ss(SxOr)	1234.380	68	18.153	
Intention (I)	82.779	2	41.390	18.11*
IxS	10.057	2	5.029	2.20
IxOr	7.160	2	3.579	1.57
IxSxOr	5.227	2	2.613	1.14
error IxSs(SxOr)	310.778	136	2.285	
Effort (E)	2099.677	2	1049.839	190.11*
ExS	.335	2	.167	.03
ExOr	52.122	2	26.061	4.72*
ExSxOr	6.514	2	3.257	.59
error ExSs(SxOr)	751.019	136	5.522	
IxE	12.193	4	3.048	1.72
IxExS	7.508	4	1.877	1.06
IxExOr	2.897	4	.724	.41
IxExSxOr	14.273	4	3.568	2.02
error IxExSs(SxOr)	480.796	272	1.768	

TABLE 2 - Continued

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Outcome (Ot)	3556.797	1	3556.797	187.11*
OtxS	31.797	1	31.797	1.67
OtxOr	59.204	1	59.204	3.11
OtxSxOr	12.445	1	12.445	.65
error OtxSs(SxOr)	1292.590	68	19.009	
IxOt	45.520	2	22.760	14.78*
IxOtxS	4.724	2	2.362	1.53
IxOtxOr	3.048	2	1.524	.99
IxOtxSxOr	1.992	2	.996	.65
error IxOtxSs(SxOr)	209.383	136	1.540	
ExOt	70.187	2	35.093	6.45*
ExOtxS	.715	2	.357	.07
ExOtxOr	20.261	2	10.130	1.86
ExOtxSxOr	3.252	2	1.626	.30
error ExOtxSs(SxOr)	739.920	136	5.441	
IxExOt	8.434	4	2.108	1.39
IxExOtxS	3.119	4	.780	.52
IxExOtxOr	5.397	4	1.349	.89
IxExOtxSxOr	3.082	4	.770	.51
error IxExOtxSs(SxOr)	411.636	272	1.513	

interactions were significant.

Intention x Outcome Interaction

Table 2 shows that the intention x outcome interaction (IxOt) was significant. This significant relationship indicates that the differences which exist between the evaluations of the various stories were influenced by the descriptions of the child's intent presented in the stimulus stories as well as by the outcome of the event. Table 3 (A) and (B) gives the mean evaluative judgments for the three levels of intention and the two types of outcome.

TABLE 3(A)

Mean Evaluation of Above Average, Average, and Below Average Intention by Outcome

	Outcome	
	Pass	Fail
Intent:		
Above Average	2.7658	- .9722
Average	2.0555	-1.1250
Below Average	1.7130	-1.2222

TABLE 3(B)

Mean Evaluation of Above Average, Average, and Below Average Effort by Outcome

	Outcome	
	Pass	Fail
Effort:		
Above Average	3.8380	- .0093
Average	2.5046	- .7917
Below Average	.1944	-2.5185

In order to interpret the interaction, a simple effects test of intention at the two levels of outcome was performed. These results are presented in Table 4.

TABLE 4

ANOVA Summary Table: Simple Effects of Intention at Two Levels of Outcome

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Outcome:				
Pass	125.423	2	62.6310	32.7568*
Fail	6.849	2	3.425	1.791
Error		272	1.912	

These results indicate that while statements about the child's relative

level of intention had a significant effect on teachers' evaluations of passing performance, $F(2,272) = 32.7568$, $p<.01$, intention was not a significant determinant of the evaluation of failure, $F(2,272) = 1.791$, $p>.05$. These results are illustrated in Figure 1.

Thus it can be seen that in the stories depicting a child who successfully completed the assigned task, teachers utilized the intention cues so that evluations were more positive as a function of relatively greater intent to perform. However, in stories depicting a child who was unsuccessful at completing the assigned task, differences in evaluations as a function of relative intent to perform were negligible. In order to determine the source of the differences between the three levels of relative intention in the passing condition, a Newman-Keuls Multiple Comparison Test was performed. The results of this test indicate a significant difference between each of the three levels of intention. An inference of above average intent was most highly influential and produced significantly more positive evaluations than either average or below average intent ($p<.01$). In addition, average intent produced significantly more positive evaluations than below average intent ($p<.01$).

The relative effect of the levels of intention on teachers' evaluations of students' performance was examined by means of trend analyses. The results of the test of trend revealed a quadratic relationship between evaluative judgments and the intent of the student, $F(1,272) = 7.754$, $p<.01$. As illustrated in Figure 1, the increased positive value of above average intent to perform over the value of average intent to perform (mean difference = .713) was greater than the decrease in evaluation of below average intent to perform (mean

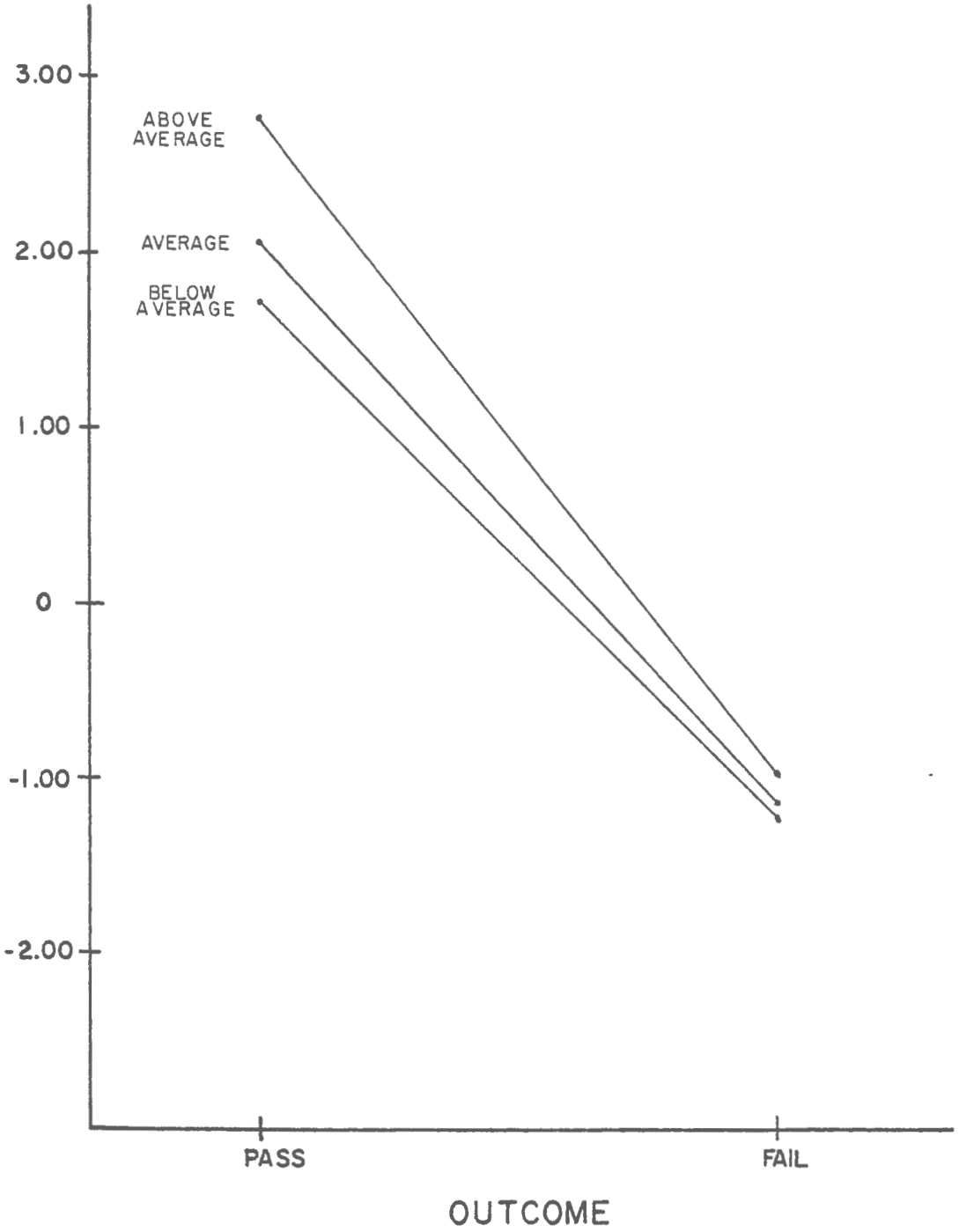

Figure 1. Evaluation of above average, average, and below average intention as a function of outcome.

difference = .342).

Effort x Outcome Interaction

Table 2 shows that the effort x outcome interaction (ExOt) was significant, indicating that the differences which exist between the teachers' evaluations were influenced by the descriptions of the child's effort expenditure as well as by the outcome of the event. The mean evaluative judgments for the three levels of effort and the two types of outcome are presented in Table 3 (B).

In order to interpret the interaction, a simple effects test of effort at the two levels of outcome was performed. The results are presented in Table 5.

TABLE 5

ANOVA Summary Table: Simple Effects of Effort at Two Levels of Outcome

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Outcome:				
Pass	1451.818	2	725.909	132.441*
Fail	712.092	2	356.559	64.96
Error		272	5.481	

These results indicate that statements about the child's level of effort had a significant effect on teachers' evaluative judgments of both passing performance, $F(2,272) = 132.441$, $p<.01$, and failing performance, $F(2,272) = 64.96$, $p<.01$. Figure 2 illustrates these results.

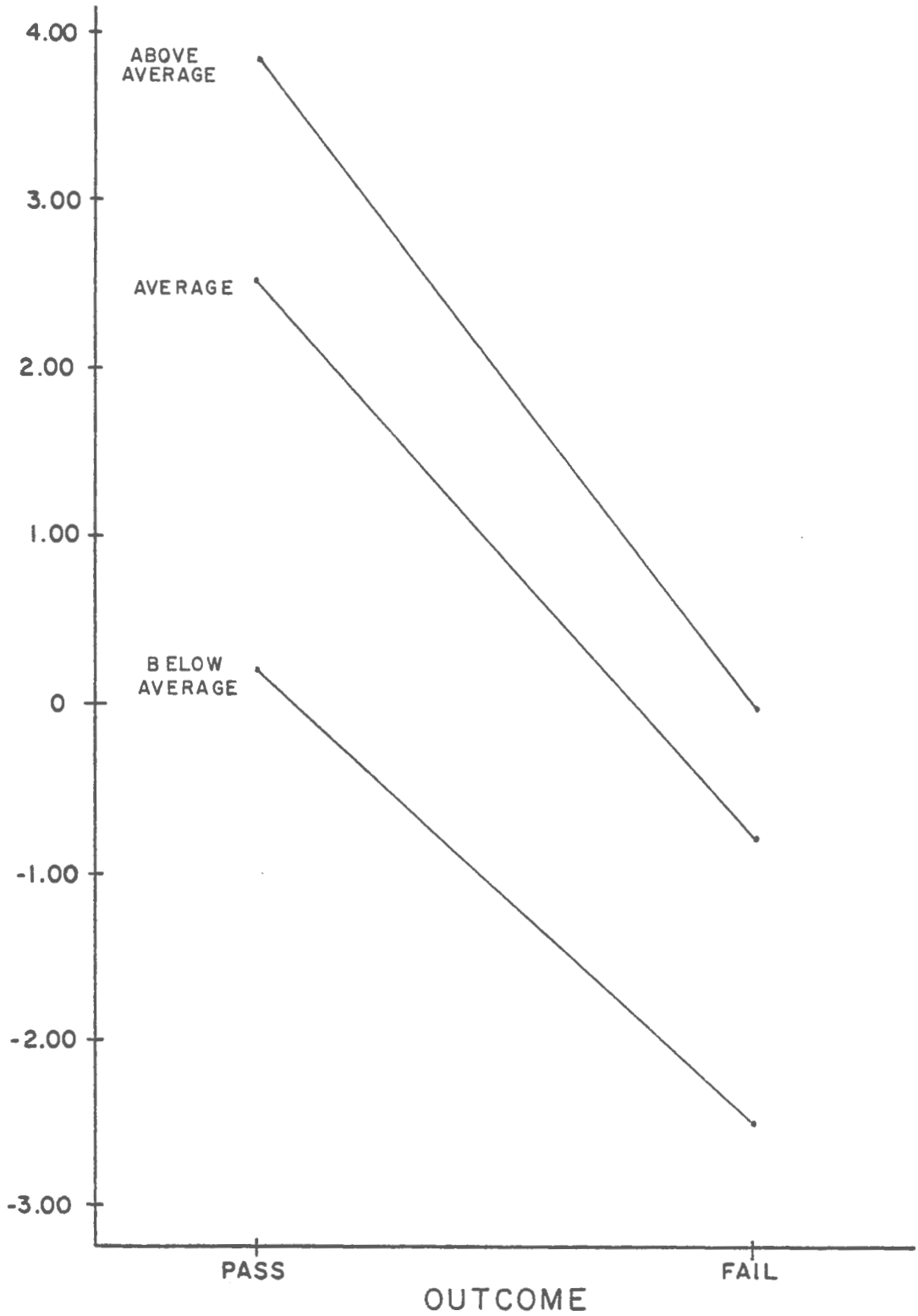

Figure 2. Evaluation of above average, average, and below average effort as a function of outcome.

In order to determine the source of the differences between the three levels of effort, a Newman-Keuls Multiple Comparison Test was performed for both outcomes. The results indicate with both passing and failing outcome a statement of above average effort produced significantly more positive evaluations than either average or below average effort ($p<.01$). In addition, a statement of average effort produced significantly more positive evaluations than below average effort ($p<.01$).

The relative effect of the levels of effort on teachers' evaluations of a students' performance was examined by means of trend analyses. The results of the test of trend for positive outcome revealed a quadratic relationship between the effort of the student in the story and the evaluative judgments made by teachers, $F(1,272) = 18.803$, $p<.01$. As illustrated in Figure 2, with passing outcome the increased positive value of above average effort over average effort (mean difference = 1.3334) was less than the decreased positive value of below average effort (mean difference = 2.3102). That is, the degree to which teachers' evaluations were affected by level of effort was significantly greater between average and below average than between average and above average. The results of the test of trend for negative outcome revealed a quadratic relationship between the relative effort of the student in the story and the evaluative judgments made by teachers, $F(1,272) = 17.5767$, $p<.01$. As illustrated in Figure 2, with failing outcome the degree to which the negativity of teachers' evaluations were affected by level of effort was significantly greater between average and below average (mean difference = 1.7269) than between average and above average (mean difference = .7826).

Thus, for both passing and failing outcome, the effect of below average effort in comparison with average effort was greater than the relative effect of above average effort. An analysis of the means shows that the relative effect of above average effort was greater in the case of passing outcome (mean difference = 1.3334) than in the case of failing outcome (mean difference = .7824). The effect of below average effort is also greater for success (mean difference = 2.3102) than failure (mean difference = 1.7268). That is, the pattern of greater relative effect of below average effort is enhanced in the case of success.

For the purpose of contrasting the differential effects of effort and intention, the intention x outcome results and effort x outcome results are graphically presented in Figure 3. These results indicate that for passing outcome the relative effect of above average intention is greater than that of below average intention, whereas the relative effect of above average effort is less than that of below average effort. For failing outcome the relative effect of below average effort is greater than the effect of above average effort, while the relative effects of intention are not significantly different.

Effort x Order Interaction

Table 2 shows that the effort x order interaction (ExOr) was significant. This significant relationship indicates that the differences which exist between teachers' evaluations of above average, average, and below average effort were influenced by whether teachers made their evaluations before or after making ascriptions of responsibility. Table 6 (A) presents the mean evaluative judgments for the

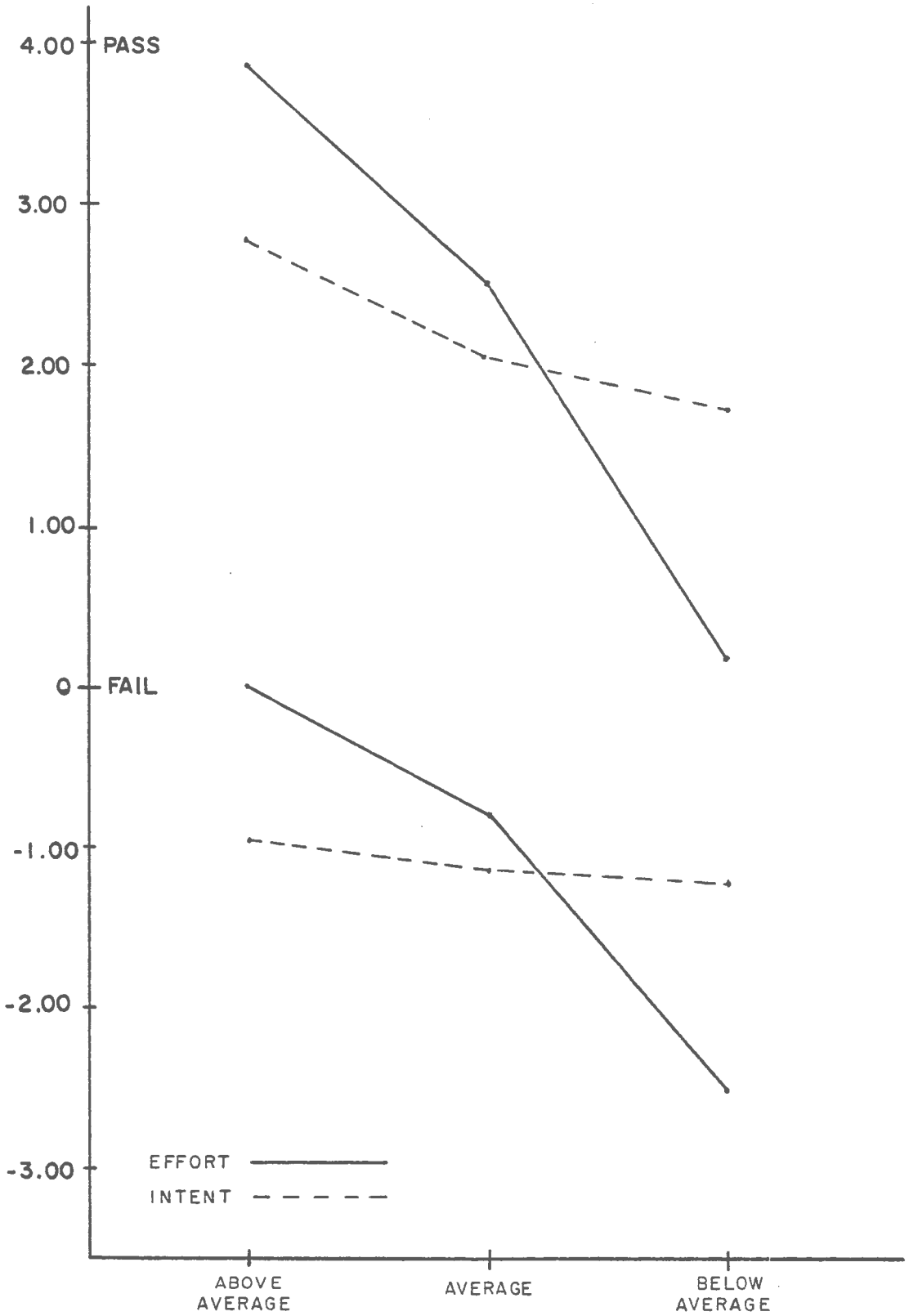

Figure 3. Evaluation of passing and failing outcome as a function of relative effort in contrast with evaluation as a function of relative intent.

three levels of effort and the two orders of response class.

TABLE 6 (A)

Mean Evaluation of Above Average, Average, and Below Average Effort by Order of Presentation

	Order	
	E:R	R:E
Effort:		
Above Average	1.6944	2.1343
Average	.7361	.9685
Below Average	- .8889	-1.3935

TABLE 6 (B)

Mean Evaluation of Above Average, Average, and Below Average Intention by Order of Presentation

	Order	
	E:R	R:E
Intention:		
Above Average	.78703	.02778
Average	.48608	.44450
Below Average	.22685	.26389

In order to interpret the interaction, a simple effects test of order at the three levels of effort was performed, and the results are presented in Table 7.

TABLE 7

ANOVA Summary Table: Simple Effects of Order at Three Levels of Effort

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Effort:				
Above Average	20.895	1	20.895	2.147
Average	5.3837	1	5.3837	.599
Below Average	27.521	1	27.521	2.828
Error		204	9.732	

These results indicate that order was not a significant determinant of teachers' evaluations within any of the three levels of effort: a) above average effort, $F(1,204) = 2.147$, $p>.05$; b) average effort, $F(1,204) = .599$, $p>.05$; and, c) below average effort, $F(1,204) = 2.828$, $p>.05$. These results are illustrated in Figure 4.

The test of the simple effects of effort at the two levels of order are presented in Table 8.

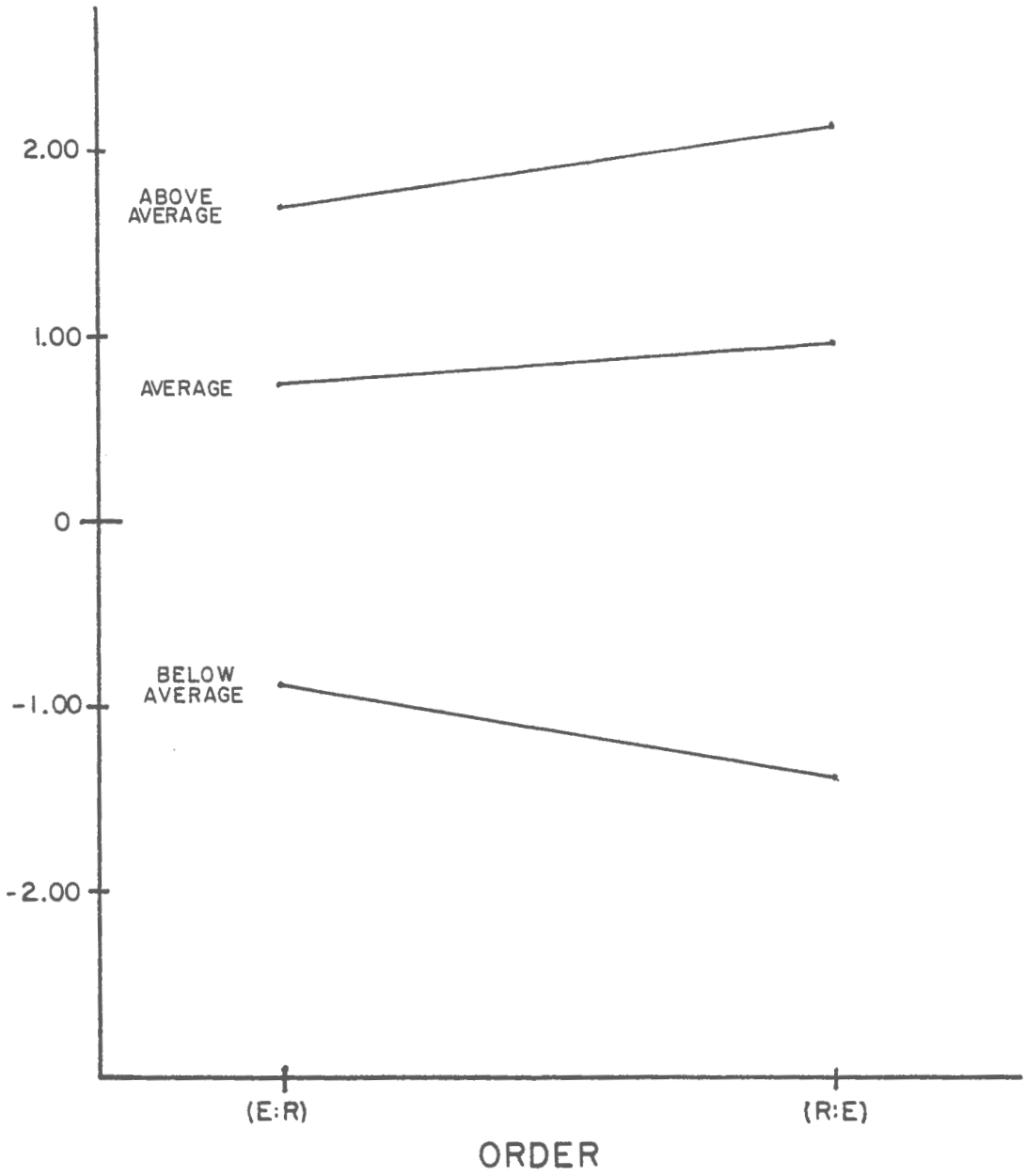

Figure 4. Evaluations of above average, average, and below average effort as a function of order of presentation.

TABLE 8

ANOVA Summary Table: Simple Effects of Effort at Two Levels of Order

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Order:				
E:R	749.723	2	374.862	67.885*
R:E	1395.620	2	697.810	126.37*
Error		272	5.522	

These results indicate that statements about the child's relative effort had a significant effect of teachers' evaluative judgments both when evaluations were made first, $F(2,272) = 67.885$, $p<.01$; and, when evaluations were made following ascriptions of responsibility, $F(2,272) = 125.39$, $p<.01$.

In order to determine the source of the differences between the three levels of effort a Newman-Keuls Multiple Comparison Test was performed for both orders. It was found that, for order E:R and order R:E, a statement of above average effort was most highly influential and produced significantly more positive evaluations than either average or below average effort ($p<.01$). In addition, a statement of average effort produced significantly more positive evaluations than a statement of below average effort ($p<.01$).

The relative effect of effort on teachers' evaluations was examined by means of trend analyses which revealed a quadratic relationship between the level of effort in the story and the evaluative judg-

ments made by teachers for order E:R, $F(1,272) = 8.693$, $p<.01$; and, for order R:E $F(1.272) = 27,9897$, $p<.01$. As illustrated in Figure 4, the degree to which teacher evaluations were affected by level of effort was significantly greater between average and below average effort than between average and above average; and, this effect was magnified when teachers had previously made decisions about the responsibility of the students for the outcome of the event being evaluated.

For the purpose of contrasting the differential effects of effort and intention, the effort x order results and the intention x order results which were presented in Table 6 are illustrated in Figure 5. An examination of Figure 5 reveals that the significant positive effects of above average and average effort and the significant negative effect of below average effort are magnified when attributions of responsibility precede evaluative judgments. That is, by having someone assess responsibility of the actor for the event prior to evaluating the actor, the effort dimension becomes more salient and results in much more extreme responses to effort. In contrast, the positive effect of above average intention is diminished by prior ascription of responsibility.

ANOVA: Responsibility Ascriptions

A five way analysis of variance (2x2x3x3x2) resulted in 72 separate cells each containing 18 observations. Means and standard deviations for each of the 72 cells of this analysis of responsibility ascriptions are presented in Table 9.

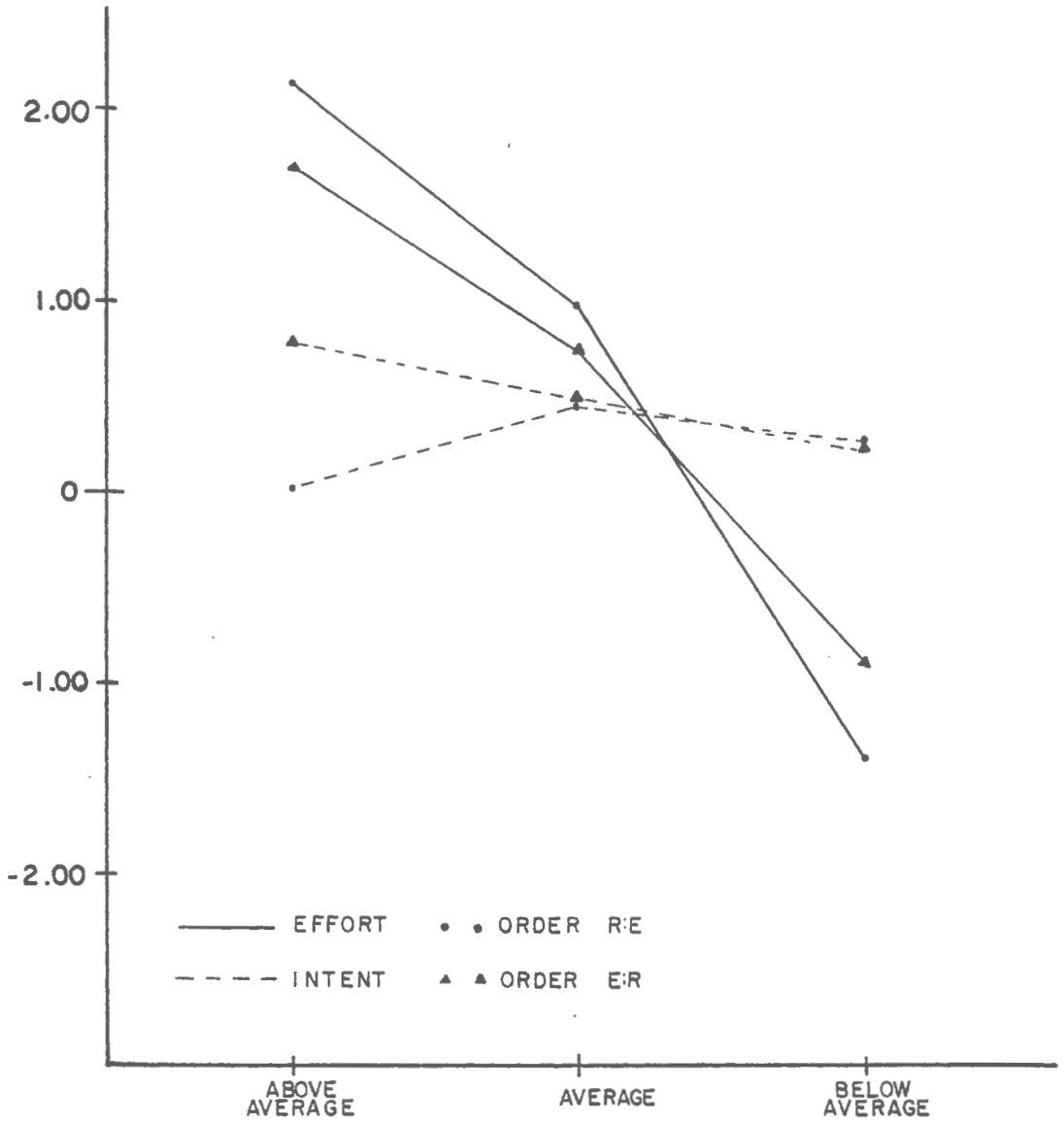

Figure 5. Evaluations for order 1 (E:R) and order 2 (R:E) as a function of relative effort.

TABLE 9

Means and Standard Deviations for Responsibility Ascriptions for Situation, Order, and Three Conditions (Intent, Effort, Outcome)

Part 1. Individual Situation

	Order			
Condition	E:R		R:E	
IEO	$\bar{X}$	sd	$\bar{X}$	sd
111	4.5000	.786	4.5556	.984
112	2.6111	1.037	2.2222	.943
121	4.2222	.943	4.0556	1.056
122	2.7222	.895	2.6667	.970
131	3.2222	.878	3.3333	1.237
132	3.3333	.907	3.7222	1.018
211	4.2222	.808	4.2222	1.114
212	2.3889	.979	2.3889	.979
221	3.6667	.647	3.7222	1.179
222	2.8889	.758	3.3333	1.138
231	2.6667	.970	2.6667	1.188
232	3.8333	.924	4.2778	.752
311	3.8889	.963	4.2778	1.018
312	2.7778	.943	2.2778	.826
321	3.3333	.767	3.6667	1.085
322	2.9444	.802	3.2778	1.127
331	2.8333	1.249	2.5556	1.423
332	3.4444	1.423	4.3889	.778

TABLE 9 - Continued

Part 2. Group Situation

	Order			
Condition	E:R		R:E	
IEO	$\overline{X}$	sd	$\overline{X}$	sd
111	4.4444	.784	4.2222	1.309
112	2.1667	.985	2.0000	1.805
121	4.0000	.970	3.8333	1.465
122	2.7778	1.114	2.5556	1.247
131	3.3889	1.092	2.8889	1.410
132	3.5000	1.150	3.8333	.985
211	4.2667	.826	4.0556	1.305
212	2.3333	1.085	1.8889	.963
221	3.8889	.900	3.5556	1.294
222	3.0556	1.211	2.3889	1.145
231	3.2222	1.114	2.6667	1.263
232	3.7222	1.127	3.9444	1.110
311	4.0556	.873	3.8889	1.367
312	2.4444	1.042	2.3333	1.188
321	3.6111	1.145	3.2778	1.179
322	3.1111	1.023	3.1667	1.098
331	3.0000	1.283	2.8333	1.295
332	3.8333	1.295	4.2778	.895

Table 10 summarizes the results of the overall analysis of variance of responsibility ascriptions. The alpha level was set at $p<.05$ for all analyses involving the between subject factors, situation and order. Because of the sensitivity of the within subjects design, the alpha level was set at $p<.01$ for those factors involving repeated measures. Significant differences were found for the main effect of outcome, $F(1,68) = 33.63$, $p<.01$. Two of the two-way interactions were significant: a) intention x outcome, $F(2,136) = 21.97$, $p<.01$; and b) effort x outcome, $F(2,36) = 118.78$, $p<.01$. None of the three-way, four-way, or five-way interactions were significant.

TABLE 10

ANOVA Summary Table for Responsibility Ascriptions

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Situation (S)	1.778	1	1.778	.26
Order (Or)	.309	1	.309	.04
SxOr	6.531	1	6.531	.94
error Ss(SxOr)	470.370	68	6.917	
Intention (I)	.816	2	.408	1.10
IxS	1.282	2	.641	1.72
IxOr	1.946	2	.973	2.61
IxSxOr	1.307	2	.654	1.75
error IxSs(SxOr)	50.648	136	.372	
Effort (E)	3.511	2	1.755	2.37
ExS	4.042	2	2.021	2.73
ExOr	4.270	2	2.135	2.89
ExSxOr	.974	2	.487	.66
error ExSs(SxOr)	100.537	136	.739	
IxE	.563	4	.141	.49
IxExS	.384	4	.096	.33
IxExOr	.378	4	.095	.33
IxExSxOr	1.008	4	.252	.88
error IxExSs(SxOr)	78.000	272	.287	

TABLE 10 - Continued

Outcome (Ot)	122.225	1	122.225	33.63*
OtxS	.694	1	.694	.19
OtxOr	2.596	1	2.596	.71
OtxSxOr	.151	1	.151	.04
error OtxSs(SxOr)	247.111	68	3.634	
IxOt	35.289	2	17.644	21.97*
IxOtxS	3.532	2	1.766	2.20
IxOtxOr	.140	2	.070	.09
IxOtxSxOr	1.353	2	.677	.84
error IxOtxSs(SxOr)	109.241	136	.803	
ExOt	428.955	2	214.478	118.78*
ExOtxS	.171	2	.086	.05
ExOtxOr	11.585	2	5.792	3.21
ExOtxSxOr	1.270	2	.635	.35
error ExOtxSs(SxOr)	245.574	136	1.806	
IxExOt	3.406	4	.851	2.13
IxExOtxS	1.338	4	.334	.84
IxExOtxOr	1.221	4	.305	.76
IxExOtxSxOr	3.517	4	.879	2.20
error IxExOtxSs(SxOr)	108.630	272	.399	

Intention x Outcome Interaction

Table 10 shows that the intention x outcome interaction (IxOt) was significant, indicating that the differences which exist in the ascriptions of responsibility were influenced by the descriptions of the child's intent as well as by the outcome of the event. Table 11 (A) gives the mean responsibility rating for three levels of intention and two types of outcome.

TABLE 11 (A)

Mean Responsibility Rating of Above Average, Average, and Below Average Intention by Outcome

	Outcome	
	Pass	Fail
Intent:		
Above Average	3.8889	2.8796
Average	3.5880	3.0370
Below Average	3.4352	3.1898

TABLE 11 (B)

Mean Responsibility Rating of Above Average, Average, and Below Average Effort by Outcome

	Outcome	
	Pass	Fail
Effort:		
Above Average	4.2176	2.361
Average	3.7454	2.9074
Below Average	2.949	3.8427

In order to interpret the interaction, a simple effects test of outcome at three levels of intention was performed. These results are presented in Table 12.

TABLE 12

ANOVA Summary Table: Simple Effects of Outcome at Three Levels of Intention

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Intention:				
Above Average	110.0036	1	110.0036	142.632*
Average	32.7859	1	32.7859	42.511*
Below Average	6.503	1	6.503	8.431*
Error		272	.77124	

These results indicate that the outcome of the event had a significant effect upon ratings of responsibility for all three levels of intention: a) above average intention, $F(1,272) = 142.632$, $p<.01$; b) average intention, $F(1,272) = 42.5106$, $p<.01$; and, c) below average intention, $F(1,272) = 8.43188$, $p<.01$. A comparison of the F ratios suggests that the magnitude of the effect varied across the three levels. Differing outcome produced the greatest effect for above average degree of intent. The smallest effect was found for below average degree of intent. These results are illustrated in Figure 6. In addition, a simple effects test of intention at the two levels of outcome was performed. These results are presented in Table 13 and they indicate that intention significantly affected responsibility ratings for both passing outcome, $F(2,272) = 19.5777$, $p<.01$; and, failing outcome, $F(2,272) = 8.841$, $p<.01$. As illustrated by Figure 6, the effects of intent appear to be greater in the case of success than in the case of failure. In order to determine

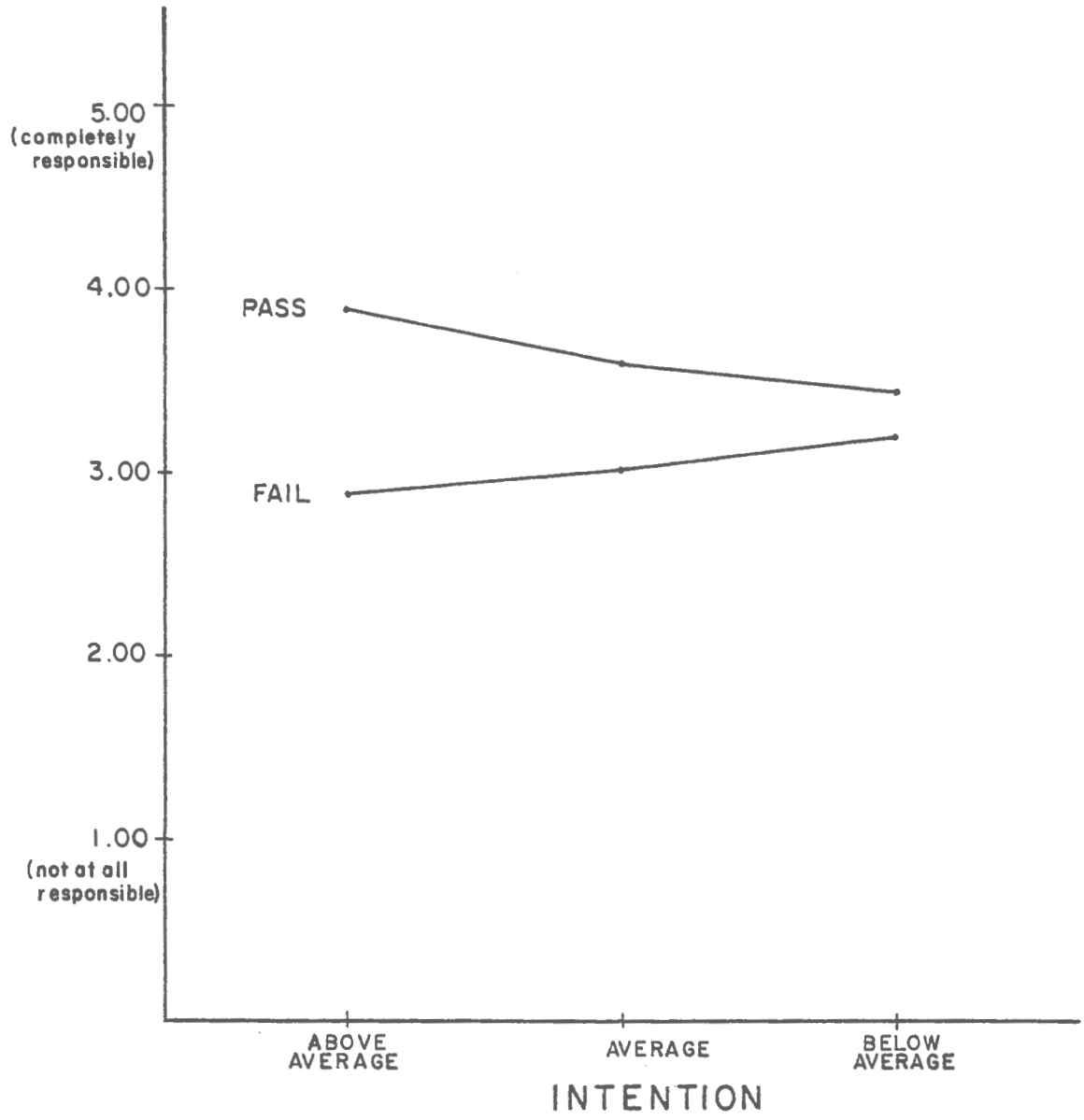

Figure 6. Responsibility ratings for passing and failing outcome as a function of level of intention.

TABLE 13

ANOVA Summary Table: Simple Effects of Intention at Two Levels of Outcome

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Outcome:				
Pass	23.0147	2	11.50735	19.577*
Fail	10.3935	2	5.19675	8.841*
Error		272	.5878	

the source of these effects, a Newman-Keuls Multiple Comparison Test was performed. It was found that in the case of passing outcome, a statement of relatively above average intent to perform was most highly influential and produced ratings of responsibility that were significantly greater than either average or below average intent, $p<.01$. In addition, a statement of average intent produced ratings of significantly greater responsibility than below average intent, $p<.05$. In the case of failing outcome, a statement of below average intent produced significantly greater ratings of responsibility than average intent, $p<.05$ or above average intent, $p<.01$. In addition, average intent produced significantly greater ratings of responsibility than did a statement of above average intent, $p<.05$.

The relative effect of levels of the intention variable on teachers' ratings of responsibility was examined by trend analyses. The results of the test of trend for positive outcome revealed a quadratic relationship between the intent of the student in the story and the

responsibility ratings made by the teachers, $F(1,272) = 4.0286$, $p<.05$. As illustrated in Figure 6, when outcome was positive, the increased degree of responsibility of above average intent to perform over average intent to perform (mean difference = .301) was greater than the decreased degree of responsibility of below average intent to perform beneath average intent (mean difference = .153). The results of the test of trend for negative outcome revealed a linear relationship between the intent of the student in the story and the degree of responsibility attributed to the student, $F(1,272) = 17.6808$, $p<.01$. As illustrated in Figure 6, the increased degree of responsibility of relatively below average intent in comparison with average intent (mean difference = .157) was quite similar to the decreased degree of responsibility of above average intent in comparison with average intent (mean difference = .153). Thus, in the case of success, above average intent to perform had a much stronger effect on ratings of responsibility than did below average intent. Whereas, in the case of failure, effects at each of the three levels of the intention variable appeared to be of comparable strength.

Effort x Outcome Interaction

Table 10 shows that the effort x outcome interaction (ExOt) was significant. This significant relationship indicates that the differences which exist in the ascriptions of responsibility for the various stimulus stories were influenced by the descriptions of the child's effort that were presented in the stories as well as by the outcome of the event. Table 11 (B) gives the mean responsibility rating for the three levels of effort and the two types of outcome.

In order to interpret the interaction, a simple effects test of outcome at the three levels of effort was performed. The results are presented in Table 14.

TABLE 14

ANOVA Summary Table: Simple Effects of Outcome at Three Levels of Effort

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Effort:				
Above Average	372.2362	1	372.2362	154.135 *
Average	75.8348	1	75.8348	31.4016*
Below Average	86.237	1	86.237	35.7089*
Error		204	2.415	

These results indicate that the outcome of the event had a significant effect upon ratings of responsibility for all three levels of effort: a) above average effort, $F(1,204) = 154.135$, $p<.01$; b) average effort, $F(1,204) = 31.4016$, $p<.01$; and c) below average effort, $F(1,204) = 35.7089$, $p<.01$. A comparison of the F ratios suggests that although outcome effects were significant at each of the three levels of effort, the magnitude of the effect was not equivalent across the three levels. The greatest effect was evident with those stories where the child had demonstrated much more effort than the other children in the class. Effects for average and below average effort appear to be of essentially equal magnitude, though of opposite direction. These effects are

illustrated in Figure 7.

The results of the simple effects test of effort at the two levels of outcome are presented in Table 15.

TABLE 15

ANOVA Summary Table: Simple Effects of Effort at Two Levels of Outcome

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Outcome:				
Pass	177.5697	2	88.785	69.7995
Fail	242.513	2	121.2565	95.327
Error		272	1.272	

These results indicate that the relative level of effort of the child that was stated in the stories significantly affected the rating of responsibility with both passing outcome, $F(2,272) = 69.7995$, $p<.01$; and, failing outcome, $F(2,272) = 95.327$, $p<.01$.

Thus it can be seen that increased levels of effort of the child in the story served to increase the degree to which the child was considered to be responsible for succeeding at a task. Decreasing levels of effort of the child in the stories served to increase the degree to which the child was held accountable for the failure.

In order to examine the source of the effort effects, a Newman-Keuls Multiple Comparison Test was performed for both passing outcome and failing outcome. These results indicate that for passing outcome,

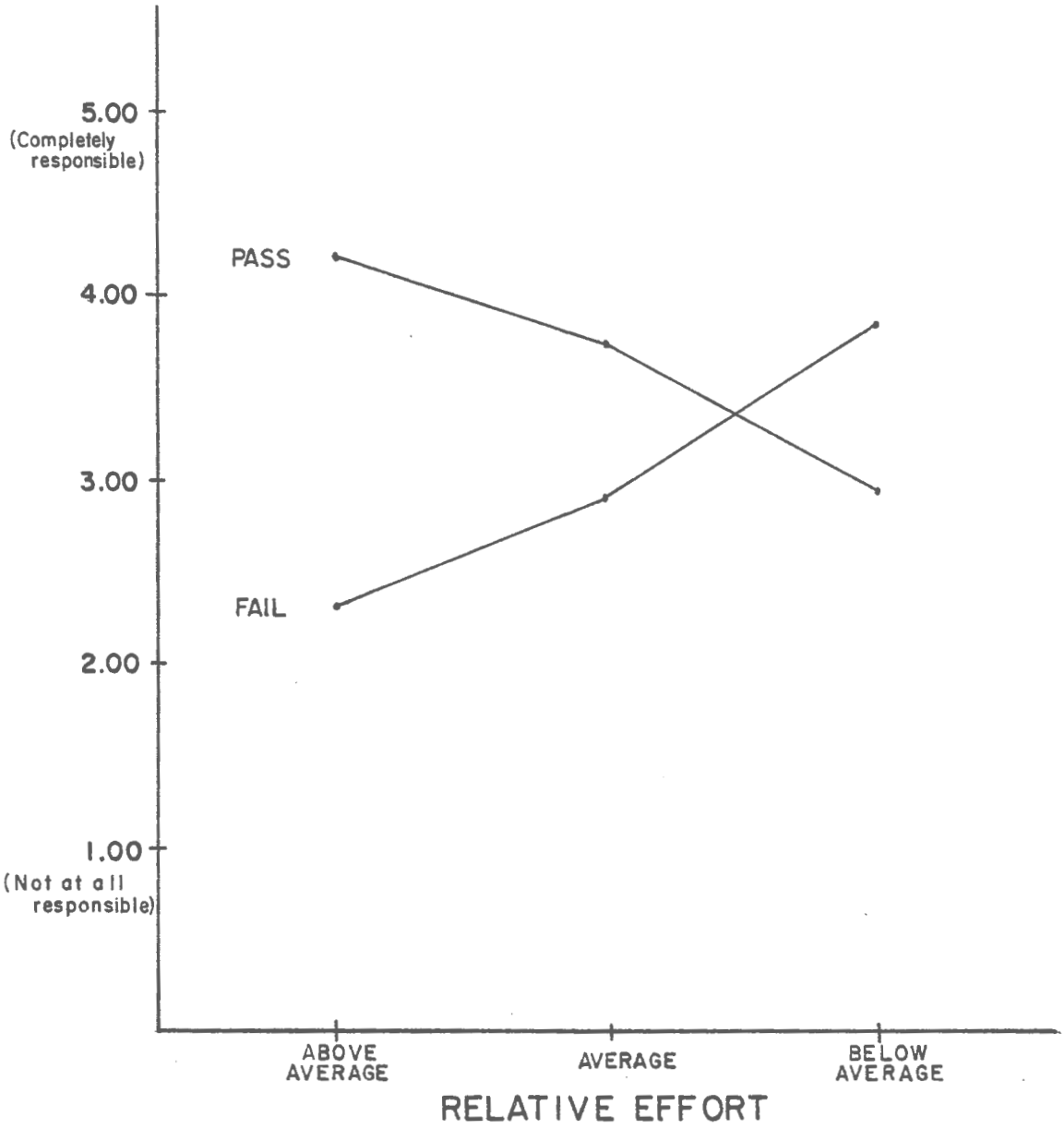

Figure 7. Ratings of responsibility for positive and negative outcome as a function of effort.

a statement of above average effort was most highly influential and produced ratings of responsibility that were significantly greater than those produced by statements of either average or below average effort, $p<.01$. In addition, a statement of average effort produced ratings of responsibility that were significantly greater than those for below average effort, $p<.01$. For failing outcome, a statement of below average effort produced significantly greater ratings of responsibility than those produced by statements of either average or above average effort, $p<.01$.

The relative effect of effort on teachers' ratings was examined by means of trend analyses. The results of the test of trend for positive outcome revealed a quadratic relationship between the effort of the student and the responsibility ratings, $F(1,272) = 11.3426$, $p<.01$. As illustrated in Figure 7, when outcome was that of passing, the increased degree of responsibility of above average effort over average effort (mean difference = .4722) was less than the decreased degree of responsibility of below average effort beneath average effort (mean difference = .7964). The results of the test of trend for negative outcome revealed a quadratic relationship between the relative effort of the student and the degree of responsibility attributed to the student, $F(1,272) = 16.3349$, $p<.01$. As illustrated in Figure 7, the increased degree of responsibility of below average effort over the degree of responsibility for average effort (mean difference = .9353) was greater than the decreased degree of responsibility of above average effort in comparison with average effort (mean difference = .5464).

For the purpose of contrasting the differential effects of effort and intention, the intention x outcome results and the effort x outcome

results which were presented in Table 11 are illustrated in Figures 6 and 7. An examination of the data presented reveals that in the case of positive outcome, the decreasing trend in ascriptions of responsibility from above average effort to average effort is enhanced as effort decreases from average to below average whereas the decreasing trend associated with intention as it moves from above average to average is not enhanced as intention decreases from average to below average but instead is diminished. Similarly, in the case of negative outcome, the increasing trend in ascription of responsibility for failure that accompanies decreasing levels of effort is enhanced as the level of effort moves from average to below average, while the increase in the ascription of responsibility for failure that accompanies a decrease from above average to average intention is diminished.

Correlation: Evaluative Judgments and Responsibility Ascriptions

Pearson correlation coefficients were calculated between the absolute values of the evaluative judgments made to the stimulus stories and the ascriptions of responsibility to the same stories. The evaluative judgments were originally rated by the teachers from -5 to +5, but the signs were removed for this correlation. The reason for using the absolute value instead of the original ratings was to make it possible to examine the relationship between the degree to which a child was held responsible for an outcome and the intensity, regardless of sign, of the evaluation of that child; that is, to determine for each of the stories whether children held to be considerably responsible would receive ratings close to +5.0 for positive evaluations or close to -5.0

for negative ratings; and, whether children held not at all responsible for an event would receive relatively neutral (near zero) evaluations.

Correlations were calculated separately for each of the eighteen individual situation stories and for each of the eighteen group situation stories to determine whether a teacher's evaluative judgment for a given story corresponded to the teacher's responsibility rating for that story. These results are presented in Table 16. Only three of the thirty six correlation coefficients departed significantly from zero, ($p<.05$). There was no consistent direction or pattern present in this set of correlations. Values ranged from $r = -.4891$ to $r = .3914$. The median value for these correlations was very close to zero: .0976. Since three rejections of the null hypothesis is approximately what could be expected by chance alone, it appears that no meaningful relationship exists between a subject's responses on the two dependent measures within any of the separate conditions.

Another manner of assessing the relationship between ascriptions of responsibility and evaluative judgments was to examine the correspondence between each subject's general tendency to hold children responsible for the outcome of events he/she evaluated and his/her tendency to give more or less extreme evaluations. Rank order correlations were therefore calculated between mean responsibility ratings and mean absolute evaluations were calculated separately for each of the four between group variable conditions for the 18 subjects in each condition: (IER) Rho = .3105, (IRE) Rho = .147, (GER) Rho = .206, (GRE) Rho = .164. None of these four correlations reached the .05 level of significance.

TABLE 16

Correlations Between Responsibility Ratings and Absolute Evaluative Judgments for Each of Eighteen Conditions in Individual and Group Situations

Condition I E O	Situation Individual	Group
1 1 1	.2855	.2411
1 1 2	-.2747	-.2085
1 2 1	.0964	-.1211
1 2 2	-.2295	-.0874
1 3 1	-.2295	.1406
1 3 2	.0667	.0796
2 1 1	-.0213	.1970
2 1 2	-.4891*	-.1712
2 2 1	.0064	.1148
2 2 2	-.2019	.0477
2 3 1	.1579	-.0375
2 3 2	.1914	.3457
3 1 1	.1662	.3590*
3 1 2	-.1092	.1605
3 2 1	.0988	.1067
3 2 2	-.1275	.1873
3 3 1	-.1177	-.0645
3 3 2	.3914*	.2568

*$p < .05$

While there was no significant relationship found either between the actual ratings of responsibility and the evaluations made by the 72 subjects for each of the thirty six separate conditions, or between a subject's tendency to hold different children responsible and the subject's tendency to make extreme evaluations across situations, there were strong similarities between the overall pattern of responsibility ascriptions and the overall pattern of evaluations in the mean scores. That is, the treatment effects had a similar pattern for both dependent measures. From this parallel it seemed likely that there was a parallel sensitivity of the two dependent measures to the experimental manipulations. The rank order comparison of these effects (Rho = .850) is presented in Table 17.

TABLE 17

Rank Order for Mean Scores of Absolute Evaluative Judgments and Responsibility Ascriptions for All Groups

Part 1. Individual Situation	Order					
	E:R			R:E		
Condition IEO	Rank E	Rank R	D	Rank E	Rank R	D
111	3	2	1	4	1	3
112	53	59	6	48	69	21
121	8	10.5	2.5	21	14	7
122	42	54	12	65	56.5	8.5
131	50.5	41.5	9	62	36.5	25.5
132	29.5	36.5	7	25.5	26	.5
211	5	10.5	5.5	11	10.5	.5
212	48	64	16	46	64	18
221	29.5	28.5	1	35	26	9
222	38	48.5	10.5	60	36.5	23.5
231	58	56.5	2.5	63.5	56.5	7
232	31.5	22.5	9	25.5	6	18.5
311	11	18.5	7.5	15	6	9
312	72	52.5	19.5	44	68	24

TABLE 17 - Continued

Condition	Order E:R Rank E	Rank R	D	Order R:E Rank E	Rank R	D
321	23.5	36.5	13	34	28.5	5.5
322	42	47	5	70	39.5	30.5
331	70	50.5	19.5	39.5	60.5	21
332	36	33	3	18	4	14

Part 2. Group Situation

Condition	Order E:R Rank E	Rank R	D	Order R:E Rank E	Rank R	D
IEO						
111	1	3	2	2	10.5	8.5
112	57	70	13	48	71	23
121	15	16	1	17	22.5	5.5
122	53	52.5	.5	60	60.5	.5
131	50.5	34	16.5	55.5	48.5	7
132	23.5	32	8.5	19	22.5	3.5
211	6	8	2	7	14	7
212	60	66.5	6	67	72	5
221	27.5	18.5	9	21	31	10
222	39.5	45	5.5	55.5	64	8.5
231	45	41.5	3.5	70	56.5	13.5
232	31.5	26	5.5	21	17	4
311	13	14	1	9	20	11
312	53	62	9	67	66.5	.5
321	27.5	30	2.5	33	39.5	6.5
322	37	44	7	42	43	1
331	63.5	46	17.5	67	50.5	16.5
332	11	22.5	11.5	15	6	9

Thus, responsibility ascriptions and evaluative judgments were affected in very much the same manner by the stimulus cues. These data suggest that the two dependent measures are therefore related in some way.

IV. DISCUSSION

The primary purpose of this dissertation was to examine evaluative judgments and ascriptions of personal responsibility of upper level elementary school teachers to the academic performance of pupils. The major focus of the research was to investigate the effects of specific situational and motivational causal cues, particularly the differential effects of intention and effort, on such evaluative judgments and responsibility ascriptions. Another major aspect of the current study was an analysis of the relationship between evaluations and attributions of responsibility. Because of the quantity and complexity of the results to be discussed, this chapter will be organized in three sections: 1) interpretations of the evaluative judgments, 2) interpretations of the responsibility ascriptions, and 3) interpretation of the relationship between evaluations and responsibility ascriptions.

Evaluative Judgments

There were two types of independent variables included in this study. These were situational variables and motivational variables. On the basis of previous research only one of the variables in this study, locus of outcome consequence, would be defined as a situational variable. However, since the success or failure of an outcome truly defines the class of situation being judged, rather than being a class of causal cue, outcome will be discussed here as a situational variable. The intention and effort variables will be discussed together as motivational variables.

Situational Effects

It was hypothesized that whether the outcome of an event was a success or failure would significantly affect evaluative judgments. As anticipated, it was found that overall evaluative judgments for success were positive while overall evaluative judgments for failure were negative. These results are consistent with previous research (Weiner, 1974b) and were anticipated with considerable certainty. There is an obvious relationship between teaching goals, such as skill acquisition or academic excellence, and a teacher's reaction to or evaluation of passing versus failing performance.

A subtler and perhaps more interesting question that was examined here was whether the locus of outcome consequence (i.e., who was affected by the outcome) would influence evaluative judgments. This question which has emerged from a consideration of a number of prior research studies remains unanswered. Weiner and Peter (1973) had found that the importance of motivational cues for the evaluation of children differed according to the type of task depicted in the stimulus stories, that is, whether the child was described as working on an individually assigned classroom task, or as being asked to help a lost child. On the basis of their results, Weiner and Peter concluded that two different causal attribution systems were employed on the basis of whether an achievement or a moral situation was being judged.

Parsons (1974) however pointed out several serious criticisms of the Weiner and Peter study. Since moral components and achievement components are both inherent in any task, the differential effects obtained by Weiner and Peter could not entirely be attributed to a moral versus achievement dichotomy. Instead, Parsons suggested that

these effects were related to two variables that confounded the moral and the achievement stories: the competitiveness versus noncompetitiveness of the task and the social versus asocial context of the task. Specifically, Parsons suggested that the competitiveness of the task would reflect its importance and affect the use of outcome information, while the social context would reflect whether the individual was concerned about the welfare of others and would affect the use of motivational cues. She sought to separate these dimensions explicitly and found that while the importance of the motivational cues differed according to the competitiveness of the task, the use of these cues did not differ according to the social context of the task.

It should be noted that the social context of the stimulus materials was defined by Parsons in terms of the social intent and social consideration of the target subject in the stimulus stories rather than by any obvious or identifiable element of the situation being judged. That is, a situation was defined as social if the target individual's intention had explicit social implications. For example, a positive social story involved a desire to help a friend or to help someone's team win. A situation was defined as asocial when the actor's intentions had no social implications. For example, a positive asocial story involved the individual's desire to win a game or a sports event, or the desire to prevent some object from being ruined with no direct concern for the feelings of the owner of the object. A more direct way to define the social context, however, would be in conjunction with the final outcome of the event and its social versus asocial context. For example, a social situation would be one in which there is some actual involvement of others in a particular activity or in which the effects

or outcome of the event or action in some way impinge upon other individuals in addition to the target actor.

Silverstein (1977) extended the investigation of situational effects by examining the importance of locus of outcome consequence, that is whether the outcome affected someone other than the actor or whether the actor alone was involved. The results of Silverstein's research suggest that the differential evaluation of degree of perceived motivation was enhanced when outcome also affected individuals other than the actor. However, Silverstein's stimulus stories varied not only on locus of outcome consequence but also on the type, and perhaps importance, of the task, and also on degree of responsibility of an actor for the outcome. As a result, interpretations drawn from the aforementioned result must be stated cautiously.

In order to clarify the source of the situational effects reported by Parsons (1974) and Silverstein (1977) the stimulus materials used in this study varied locus of outcome consequence for a single type of task, a class project. Based upon the suggestions from previous research it was anticipated that locus of outcome consequence would be a salient cue and would affect evaluative judgments of the students in the stimulus stories. Specifically, it was hypothesized that positive evaluations for success and negative evaluations for failure would be enhanced when effects were to another individual as well as to the actor being judged. The data however, did not support this prediction. In this study, individual locus of outcome consequence and group locus of outcome consequence did not yield significantly different evaluations.

There are several explanations possible for the absence of any outcome consequences effect in this study. It could be suggested that

locus of consequence is indeed a salient cue in the natural environment and that the absence of an experimental affect on the dependent variables of the current study is merely an insensitivity of the design or of the stimulus materials employed. Alternatively the basis for the absence of experimental effects might be that the locus of outcome consequence is not an important determinant of the utilization of motivational cues in the evaluation process. Thus it may be that the results previously reported by Silverstein (1977) were the result of some other feature of the situational variable manipulated rather than whether others were affected by the outcome.

The current study utilized a single task where children were required to complete class projects. In the individual condition the outcome consequence (being able to go on a class trip or not being able to go on a class trip) only affected the target child. In the group condition the outcome consequence of the class trip affected the entire class as well as the target child. That is, for the individual effect, if a child failed the assignment he or she had to forfeit a class trip; whereas, for the group effect, if a child failed the assignment the entire class would forfeit the class trip. A number of the teachers who were subjects in the study made written comments on the data sheets, and several indicated to the experimenter that they were philosophically opposed to a condition in which a whole class suffered the consequences brought on by a single child and that they would never permit such consequences to occur in their classrooms. Since any class trip would be for educational purposes and not for the purpose of reward, no class trip would be cancelled or postponed as the result of passing or failing performance of any or all of the children in the class. On the basis of

these comments, it may be argued that the teachers who made such comments, (and by implication the other teachers in the sample) discounted or ignored the group locus of consequence information. Thus it may be that teachers merely looked at the behavior of the target student and evaluated the outcome for that student, disregarding any statements about the consequence to others because they felt that such statements were unrealistic or invalid. If this were the case, evaluations of both the individual and the group situations would be based upon identical stimulus stories with outcome affecting only the target student and would produce no significant differences. Moreover, if the different effects reported by Silverstein (1977) were indeed related to locus of outcome consequence rather than to type or importance of the task (test vs. group project), then the results of the current study would be expected to parallel the results obtained previously for individual consequences and the current results should not be comparable with those previously obtained for group consequences. An analysis of Silverstein's (1977) results indicates that the pattern of effects obtained for individual consequences was quite distinct from the pattern of effects obtained for group consequences. The effects of effort on evaluations of the individual consequences were demonstrated by a linear trend showing that for such tasks teachers were as concerned by both above average and below average effort, whereas, the effects of effort for group consequences were demonstrated by a quadratic trend, showing that the teachers were more affected by below average than above average effort. A comparison made between the pattern of results that were obtained in this study and the patterns obtained by Silverstein indicates that the current results for both outcome contingencies fail to corres-

pond with the previously obtained pattern of results for individual consequences (test task). Instead, the current results for both the individual outcome consequence for a class project and for the group outcome consequence for a class project more closely resemble the pattern of results which Silverstein reported for group consequences (project task). That is, teachers were more affected by below average than average effort. Therefore, it appears that previously reported effects of locus of outcome consequence may have been the result of differences in the types of stimulus tasks employed, i.e. test versus project, rather than a reliable effect of the locus of outcome consequences variable.

The results of the current study thus do not support Silverstein's (1977) claim that locus of outcome consequence is a salient situational cue for the process of making evaluative judgments. What is needed to clarify the source of the effect is an examination of the potential effect of locus of outcome consequences through a controlled use of a single situation that has validity for classroom teachers. An example of such a study would be one that employed stimulus stories depicting a single cooperative group project task. The individual locus of outcome consequence could be reflected in a situation where a child, after participating in the class learning experience was required to produce an individual project such as a drawing for display or a presentation to the class. The group locus of outcome consequence could be reflected in a situation where a child, after participating in the class learning experience, was required to produce an individual project as part of a group project such as a mural for display or a group presentation to the class. In this proposed study

the outcome consequence would be directly tied to the target child's performance. That is, in the individual situation, the child's satisfactory or unsatisfactory completion of the assignment would directly impinge upon the quality of the group's product and would therefore affect other children. Since the effects would not be under the teacher's control and would not be such an obvious punishment to the class as the group effects in the current study were perceived to be, this proposed representation of the locus of outcome consequence variable may be considered to be more valid by the teachers. In any case, more systematic study is necessary in order for the effects of this and other situational cues to be clarified.

Motivational Effects

A major premise of attribution theory is that evaluative judgments are not based solely upon the observable and objectively measureable aspects of the outcome of an event, but they are instead based upon the evaluator's perceptions of the causes of the event. The motivation of an individual to perform an act is one of the aspects of an event to which causality may be attributed. Heider's (1958) theoretical analysis of motivation, which serves as a cornerstone for Weiner's (1974b) attribution model of achievement, states that there are two major types of motivational cues which are used by an observer in order to interpret an event and to understand its causes. These two types of motivational cues are the intention of the individual to perform an action and the effort expended by the individual toward accomplishment of the action.

Bolles (1972) discussed the meaning of motivational cues for the interpretation of behavior and for the prediction of future actions.

Individuals believe themselves and others to be free to act and thus believe that individuals are responsible for their actions. When making evaluations of themselves and others, individuals search for cues that will help them to understand whether the actor behaved freely and with purpose or whether the actor was in some way forced to behave as he did. Evaluations are then based upon whether the actor behaved with intent or under constraint. There are logico-philosophical arguments against this traditional view of individuals as free beings, which, as Bolles points out, suggest that freedom to act and purposive or will controlled behavior is a fallacy. However, freedom to act and self direction are components of naive implicit theories of causality which individuals do utilize to interpret and to predict the actions of others. As such, beliefs about motivational control affect evaluations of acts even if such control is not an "objective" reality in terms of causing or changing behaviors.

As was noted in an earlier chapter Heider's "naive theory of action" describes distinctions between the informational value of intention cues and the informational value of effort cues. The experimental investigations of causal attributions and achievement evaluation has not, however, adequately investigated the role of intentionality cues; and, has instead frequently confounded effort with intention. A major goal of this study was the analysis of differential motivational effects on evaluative judgments; and, a unique aspect of this research was the systematic investigation of the differences in evaluation generated by intentionality cues as opposed to effort cues. Based upon the theoretical roots of the attribution model, it was predicted that both intention cues and effort cues would significantly affect the

evaluations which teachers made of the students depicted in the stimulus stories.

Specifically, it was hypothesized that positive evaluations would be related to an increased degree of perceived intent to perform, and that more positive evaluations would be related to an increased amount of perceived effort expenditure. The results indicated that both classes of motivational cues did produce significant effects on evaluative judgments. An observor's perceptions of the intention and effort of an individual were used discriminatively to make evaluations of the outcome of the event. The results obtained for intention and those obtained for effort will be discussed separately below.

Intention Effects

The data showed a significant main effect of intention, and a significant interaction between intention and outcome. That is, the experimental levels of the intention variable produced significant effects on evaluative judgments; and, the pattern of these effects varied according to the outcome of the event. It was found that in stories depicting a child who had successfully completed the assigned task, teachers utilized the intention cues so that evaluations were more positive as a function of relatively greater intent to perform. However, in stories depicting a child who was unsuccessful at completing the assigned task, differences in evaluations as a function of relative intent to perform were negligible. Thus, when the child performed satisfactorily, the intention attributed to the child affected the way the teacher evaluated the child and the event. However, when the child did not perform satisfactorily, the intention attributed to the child

had no bearing on the evaluation of the child.

The salience of intention cues in the case of success but not in the case of failure had not been anticipated. Instead, it had been predicted that intention cues would be utilized both in the case of success and in the case of failure. The basis for this hypothesis was Heider's premise that information about intention is used to assign causal responsibility. It would follow from Heider's theory that decisions about responsibility, and thus the analysis of intentionality, would have an important effect on the evaluation of both success and failure.

Kelley (1967) and Weiner and Peter (1973) suggested that differential evaluation based upon outcome is related to societal sanctions and the expectations for certain behaviors that are based upon these sanctions. That is, there are certain behaviors which are governed by societal or moral codes and to which all individuals within a society must try to conform. When an observor views another person who is adhering to the rules and performing in accordance with the norm, the observor does not have to look for explanations of the behavior. The obvious explanation of social constraint is assumed. In such a situation the individual who behaves appropriately will be viewed in a positive light but since the demand of the societal constraint is so strong the person's intent to perform would be discounted. That is, since the individual must achieve the demanded result or suffer social consequences, his motivation to do what is right is expected and therefore is not particularly noteworthy.

From this point of view, the only behaviors which are analyzed more deeply would be those that deviate from the expectancy. Only when

a sanction is broken would an observer be compelled to assess the various components of a situation in an attempt to understand why the outcome was not governed by social constraints. In this case the observer would seek to determine whether the actor caused the outcome or whether some other factor was responsible. This decision of causal responsibility would dramatically effect the evaluation of the individual by guiding the extent to which the individual was punished for breaking or ignoring the social constraints or the extent to which the individual was excused of responsibility for the result. Bolles (1972) identified intentionality as that class of motivational cues that is called upon to explain deviations from societal constraints and to allow for social consequences for the deviations. When an actor's intention does not adhere to social rules, the actor can be held accountable for the result. However, when the actor's intention does conform to the social codes, the power of the rule is viewed as the controlling factor in the situation, and the actor's intent is considered to be secondary.

These explanations can be used as a basis for examining differential outcome effects obtained in the current study. The equivalent of the moral or social constraint of the classroom situation would be the expectation and demand for success. It would also be feasible to predict that conformity with the demand, or receiving a passing grade, would result in relatively low positive evaluations; and, since the cause of success would be the result of the rule or the constraint, it would be expected that the positive evaluations would be consistent across the degree of intent. Since the intent of the actor would not be necessary for explaining the outcome, it would not be salient for evaluating the outcome. Similarly, it would follow that when the

outcome deviated from the expected or demanded level, such as when a child receives a failing grade, the observer would rely upon intent cues to determine the individual's responsibility for the outcome. In this case, evaluations should differ on the basis of intent.

This explanation, however, is completely contradictory to the results obtained, since the operation of constraints to succeed in school should be expected to inhibit the utilization of intention cues with success and to maximize their use with failure. If the suggested operation of intention in the evaluation process is assumed to be valid, and the results of this study are interpreted accordingly, then it would seem to follow that children are not constrained by a norm to succeed in school. Rather, teachers seem to be evaluating on the basis of an expectancy for failure. It could then be argued that teachers appear to accept failure without needing to find explanations for it. Similarly, if the teachers did not anticipate success they would search for explanations according to other factors such as motivation. Although this argument can be made to fit the form of Kelley's (1967) constraint hypothesis it does not make sense in terms of obvious educational values.

A more "face valid" alternative is needed to explain the results obtained. The following suggestion is based upon written comments made by some of the teachers on the data sheets. School success is very important and is the expected outcome for all children. Teachers of elementary grades are quite concerned with the success of their students and assume responsibility for ensuring the success of each student in their classes. The teacher tries to make certain that each child is given work only at the level that he or she can complete, that each child fully understands the assignment, and that each child is provided

with the assistance necessary for success. The teacher also assumes responsibility for motivating the children, for stimulating their imagination and for setting up the tasks so that the children will want to learn and will want to succeed. If a child fails, the responsibility rests to a greater extent with the teacher, than with the child. Although a child who failed might be evaluated less positively because the teacher was disappointed with the performance, the child's intentions or lack of interest should not be the primary factor used to explain the failure or to determine the locus of responsibility. Intent cues could be utilized however, in the case of success to enhance a commendation because (if the teacher is providing the materials and stimulation that would be sufficient to ensure the success of his/her students) any additional demonstration of intent to do well on the part of the students is beyond what the teacher expects.

This interpretation of the results is much more consistent with educational values and philosophies than is an alternative interpretation which assumes an expectancy of failure. In addition, an examination of responsibility ascriptions obtained in the current study lends some support to this interpretation. The children were indeed held less responsible for failure than they were for success, although intention cues did affect responsibility ascriptions for both success and failure. The fact that intention based differences in responsibility ascriptions made in the case of failure did not produce similar differences in evaluation of failure is a very important clue to the operation of responsibility ascription as a mediator of evaluation. While this one piece of information can not illuminate the complete relationship between evaluation and responsibility, it does demonstrate the

oversimplicity of Weiner's model and of attribution theory in general. That is, there does not appear to be a direct relationship here between the effects of intention on responsibility ascriptions for failure and the effects of intention on evaluation. This will be addressed again at a later point in this discussion.

Effort Effects

It was assumed that effort would be a major cue for determining evaluations; and, this prediction was confirmed. The data indicated a significant main effect of effort, as well as significant interactions between effort and outcome and between effort and order. That is, the experimental levels of the effort variable produced significant effects on evaluative judgments, and the pattern of these effects was altered by the outcome of the event and by the order of obtaining the evaluations or the responsibility ascriptions. In general, it was found that for both passing and failing outcome the degree to which teachers' evaluations were affected by the level of effort was significantly greater between average and below average effort than between average and above average effort; and, the greater differential effect of below average effort was enhanced in the case of success. It was also found that statements of effort had significant effects on evaluative judgments both when the evaluations were made first and when the evaluations were made subsequent to decisions about personal causal responsibility of the student for the outcome. However, when evaluations were made after responsibility had been attributed, the effects were enhanced.

An analysis of the data shows effort to be a non-linear variable. That is, the effects were not equivalent across those levels of effort

that were depicted in the stimulus stories. A greater difference was found between the evaluation of average and below average effort than between average and above average effort. That is, using average as a point of reference, it appears that teachers were more negatively affected by a demonstration of below average effort than they were positively affected by a demonstration of above average effort.

The attribution model suggests that evaluations are directly or indirectly based upon expectancies which the observor may derive from past experiences or from the social norm. In addition, the model also postulates that deviations from the expected or from the norm would be attributed to the individual rather than to situational constraints, and would be given more extreme evaluations (Kelley, 1967). On the basis of this model, it would be predicted that low effort would elicit more negative evaluations than high effort would elicit positive evaluations, if the expected norm for school related tasks is that children put forth high effort to succeed. Hopefully, it would also be the past experience of most of the teachers in this study that their students have, indeed, put forth effort to complete assignments.

Silverstein (1977) obtained this same pattern of results for the effort variable in the group project situation but not in the individual test situation. While the particular pattern of effort effects are easily explained by the general attribution model, this effect may be tied to the class of task used here. That is, this same pattern of effects may not emerge for tasks other than group projects in the classroom and the pattern of effort effects may vary as a function of the type of task or of the perceived importance of the task. Before this pattern of effects can be generalized to the full range of classroom

assignments or school behaviors, a more complete range of tasks or assignments must be examined experimentally.

An analysis of the effort x outcome interaction indicates that the relatively greater influence of below average effort occurred for both successful and unsuccessful outcome; however, the effect was more pronounced when the child received a passing grade than when the child received a failing grade. In fact, the range of evaluations from below average through above average was wider for stories involving success than for stories involving failure, as was the case with the intention variable.

This effort x outcome effect was not hypothesized and, like the intention x outcome interaction, it can not be incorporated easily into the attribution model. As was suggested earlier the teachers may hold themselves to be responsible for the failure of their students while holding the students responsible for the successes. If this is the case then it would follow that teachers would be more likely to alter their evaluations of success on the basis of the child's effort than they would be to alter their evaluations of failure. As was suggested in the interpretation of intention effects, teachers need to look for the causes of events that are outside of what would be expected by social constraints. If failure is primarily the responsibility of the teacher rather than of the child, then when a child fails the motivation of the child is of secondary concern and importance. However, since hard work is valued, the child would still be expected to attempt the task, regardless of its difficulty. Evaluations of effort in the case of failure would not be as extreme as evaluations of effort in the case of success because the failure may be shared by both the teacher and the

child while the success is attributed to the child. An analysis of the results for responsibility ascriptions tends to support this suggestion since teachers held students less accountable for failure than for success. However, it must be noted that effort cues were influential in altering responsibility ascriptions for both success and failure outcomes - albeit in opposite directions. Thus the picture relating ascription of responsibility in this situation to evaluation of different levels of effort is clearly a very complex one - and will be addressed in a later section of the discussion. Before more comprehensive explanations of this result can be put forth, additional research needs to be conducted to support the reliability, generalizability, and limits of the effect.

An examination of the effects of effort on evaluations for the two orders of presentation reveals that the general pattern of results for effort was apparent in both orders. However, the effects were magnified when evaluations were made after the subjects had assigned the degree of causal responsibility for the students in the stories. Thus, it appears that for those subjects who were given a cue to the responsibility of the student in the story before making evaluations, the effort variable became more salient. This effect will be discussed in greater detail in a subsequent section of this chapter which will deal with the relationship between evaluative judgments and responsibility ascriptions.

Differential Effects of Intention and Effort on Evaluative Judgments

Investigations of causal attribution and evaluative judgments have failed to examine differential intention and effort effects despite suggestions by Heider (1958) that these two types of motivational cues provide distinct information. Instead information about intentions and effort has been confounded in the stimulus materials that have been utilized. In order to clarify the components of the attribution model, the differences between these cues must be systematically examined. If intention cues are indeed distinct from effort cues then it would be expected that these cues would produce different and distinct effects on evaluative judgments. The results of this study indicated that the effects produced by intention were different from the effects produced by effort at least to some extent.

One of the major differences between intention and effort was the strength of the effect. An examination of the F ratios shows that the main effect of effort was considerably greater than the main effect of intention. Thus, it would appear that the evaluative judgments were influenced more by the perceived degree of the child's effort than by the perceived degree of the child's intent. Perhaps intention provides a teacher with some understanding of the causes of the final outcome, but since effort is more easily observable in the natural environment of school, teachers may habitually consider effort to be more substantial class of cue and thus be more certain about effects that effort would have than the effects that intention would have. If this was the case then it would follow that effort would exert a greater influence on teachers' evaluations of the stories than would intent.

A second substantive difference between intention effects and effort effects was in the interaction of these two types of cues with the outcome of the event. The interaction between outcome and both intention and effort was such that evaluations were more affected by the motivational cues in the case of success than in the case of failure. Differences between the evaluation of passing as opposed to failing outcome, however, was most pronounced when the intention of the student was above average, whereas the strongest effort effect occurred for the case of below average. There are several possible explanations for this result. For example, it may be that these effects mirror different expectancies on the part of the teachers. Teachers may expect only minimal positive intentions from their students and thus do not respond with an extreme evaluation when students appear to be less intent on doing a good job than most of the other students in the class. In contrast, teachers may be pleasantly surprised by the student who is very intent on doing a good job and be inclined to give more extreme positive evaluations. However, teachers may expect at least average or better effort from their students regardless of the task difficulty or the final outcome and respond minimally to the expected high effort while responding with more extreme evaluations for the unexpected case of below average effort.

Another interpretation for the different interaction with outcome may be related to teachers' beliefs about the contribution of the factor to the outcome. For example, if teachers suspect that a strong positive intention can influence an outcome by facilitating success, then they may reward such intentions because they have been causal. If the teachers also suspect that below average intention will not lead to

poorer performance than average intent then they would not respond much differently to the below average intent information than they would to average intent information. In contrast, teachers may believe that while either average or above average effort will result in success, the most important contributing factor to failure is below average effort. Therefore the teachers would give more extreme evaluations to the student exhibiting below average effort. This explanation suggests that the teachers were responding to the two cues on the basis of whether the evaluation can alter future behavior. If a teacher believes that there is no way to change the undesireable intentions of students then the teacher would not be likely to give an extreme evaluation to such students. The teacher may believe, however, that a positive evaluation can sustain good intentions. On the other hand, the teachers may believe that a negative evaluation will serve to alter the effort that a child will expend and thus be inclined to give an extreme evaluation for such performance.

There is another explanation for the differential interactions of intention and effort with outcome which may be the least speculative and most plausible alternative. This involves the degree of certainty of the teachers in their inferences about the two factors. An examination of Figure 3 (page 50) reveals that for passing and for failing outcome, the evaluations of average and above average intent are less positive but nearly parallel to those for average and above average effort. The major difference occurs at the point of below average intent and effort, where the values for effort drop significantly from average to below average but the values for intention hold close to the average level. Perhaps the teachers can experience a higher degree of

certainty that a child has exhibited below average effort than they can if a child was less than normally intent on doing a good job. If this is so then the teachers would be more willing to use the low effort information to give a less positive evaluation than they would be to use the low intention information to give a lowered evaluation.

A third difference between intention and effort can be seen in their interaction with the order of making evaluations and responsibility ascriptions. The data indicated that evaluations of effort were more extreme if they were made after responsibility was ascribed, but evaluations of intention were not affected by order. There are two distinct explanations that could be used to explain those results. Perhaps evaluations of intention are implicitly tied to ascriptions of responsibility and thus are unaltered by giving the teachers a cue that responsibility of the student should be considered. Effort evaluations, however, may not be so linked with responsibility. Conversely, it may be that evaluations of effort are primary cues for assigning responsibility and that the fact of a subject's being cued to assess responsibility for the events serves to make this factor more salient. The significantly stronger overall effects of effort than of intention for both responsibility ascriptions and evaluative judgments lends greater support to the latter explanation than to the former. It is, however, possible to combine the two hypotheses by supposing that "intention" is a more abstract motivational ascription than "effort" is, that evidence for intentions is typically derived from the empirical display of effort and that there is high synonymity between the concepts of "intention" and "personal responsibility" only when there are no factual reasons (e.g. effort cues and outcome) to contradict the statements of intention.

This analysis is in accord with Ryan's (1971) analysis of perceived intention and makes sense of the effects of the manipulated variables on the responsibility attributions themselves (discussed below).

There are a number of different possible explanations that can be generated from the basic premises of attribution theory to clarify the details of the results of this study. However, much additional research is necessary before one can specify with exactness the differential mechanisms governing the role of intention and effort in the evaluation process.

Responsibility Ascriptions

Of the body of theoretical and empirical literature generated during recent years within the framework of attribution theory, a substantial portion is based upon hypotheses about "causal responsibility". Evaluative judgments of events or actions are considered to be linked to the observable outcome of the action through the mediation of responsibility ascriptions. It is assumed that extreme evaluations made by an observer are related to the degree to which the observer considers the actor to be responsible and thus accountable for the effects of his or her behavior. Thus, purposeful or motivated behavior and acts would be evaluated more seriously and extremely than would non-motivated or accidental behaviors and acts.

Heider (1958) has made some specific suggestions regarding which causal cues have an effect upon ascriptions of responsibility. According to Heider, the perceived intentions or purpose of the individual being evaluated are the most salient elements for ascribing responsibility to an actor for an event. According to Heider, once an

observer determines the responsibility of an actor on the basis of intent, then the observer can evaluate the event and respond either favorably or unfavorably to the actor. This supposition can be clarified by examining a Piagetian task that is used to assess moral development in children. Let us use the example in which an observer enters a room just as a child is dropping a tray of tea cups. The attribution model would predict that before the observer could evaluate the situation and respond to the child, the child's intent would have to be determined. If, for instance, the child had been trying to help but dropped the cups accidentally, the observer probably would not hold the child as responsible for the damage nor punish the child to the same extent as if the child had broken the cups deliberately in some act of anger or upset.

The development and the tests of attribution theory have rested primarily upon the examination of evaluations and upon the implicit assumption that responsibility ascriptions were a mediating factor in the evaluations. There is, however, little direct evidence to substantiate the mediational activity of the attributions of responsibility. In order to facilitate the development of the attribution model, more direct tests must be made of the hypothesis that responsibility ascription is based upon intentionality information and that the attribution of responsibility once inferred directly affects evaluation. Heider (1976) also pointed out the need for testing the underlying assumptions of the attribution model and stated that "the basis for connecting the independent and dependent variables to the manipulation and the measurement is usually some form of 'naive psychology' which is not investi-

gated and which is taken for granted! ... In so many experiments, there are so many explanations possible - because this naive psychology has not been thought through clearly" (p. 12).

The current study attempted to examine the responsibility ascriptions which presumably link evaluation with an event. Based upon the postulates of attribution theory it was assumed that the motivational aspects of an event would significantly affect decisions about the degree to which an actor was held accountable for the outcome of an event. Specifically it was hypothesized that responsibility ascriptions would be altered significantly by the specified motivational cues but not by the outcome of the event, per se. On the basis of Heider's system it was expected that responsibility ascriptions would be affected primarily by information about the intent of the individual. The results of the statistical analysis revealed a significant main effect of outcome on responsibility ascriptions, a significant interaction between outcome and intention effects, a significant interaction between outcome and effort effects, but no main effect of either intention or effort. This seems to directly contradict the Heider model. These three types of effects will be discussed separately below.

Outcome Effects

In general, the children depicted in the stimulus stories were held to be more responsible for their performance when they received a passing grade than when they received a failing grade. This effect of outcome on ascriptions of responsibility lends support to the suggestions put forth in the previous discussion of evaluative judgments. Teachers in the upper elementary school grades appear to recognize the

relatively limited capabilities of their students with respect to school achievement. That is, children can not on their own succeed at any task that is given to them. Because the students are still developing basic reading, mathematical, reasoning, and expressive writing skills, and because the students in any given classroom are at different levels of skill acquisition, it is the teacher and not the student who has primary responsibility for ensuring academic success. Thus when a child fails, the teacher can be held accountable to some degree for the failure and the child less so. This would be the case in particular when the teacher who is making the judgment is not intimately familiar with the children, or with the requirements of the class assignment, as in the present study.

A number of the teachers who were subjects in this study attempted to explain failure by suggesting that the assignment given to the students may not have been clearly presented or that the criteria for achievement of a passing grade may have been presented in an inadequate way to the students. Because the teachers were not absolutely sure that the failure was related to the performance of the child rather than to poor teaching, the subjects could not hold the children completely accountable for the outcome of failure. On the other hand, if the child did succeed at the task, the teachers did not question whether the assignment was too easy or the grading criteria too lenient. Apparently, the teachers assumed that the classroom teacher had presented the materials adequately and graded the assignments fairly. Thus, if a teacher satisfactorily completed the task of providing appropriate instruction and assignments, then the child could

be held primarily accountable and responsible for following through with the task and thus for receiving a passing grade. That is, in the case of failure there may be many more possible explanations for the outcome than in the case of success, and the reasons for failure may be attributed to causes outside of the child's control to a greater extent than are the reasons for success.

Although the results of this study would suggest that teachers of upper elementary level students hold the children less accountable for failure than for success, more research is needed to substantiate this conclusion. Teachers may, in fact, be very willing to hold the students in their own classes to be responsible for failures as well as for successes. If the teacher believes that they have indeed performed their tasks adequately then they would not tend to believe that the assignment was too difficult. If a teacher believes that all children are grouped according to their ability levels in the various class activities then they would also believe that the children must assume responsibility for attaining passing grades on all assignments presented to them. Perhaps, in the natural environment of the classroom, a teacher would assume principal responsibility for failure only in the rare case when an entire group or an entire class failed to meet the criteria for a passing grade, rather than when any single child did not do well. This however, remains to be examined.

Intention x Outcome Effects

The results of this study indicated that intention of the student had significant effects on ascriptions of responsibility for both passing and failing outcome. Thus, even though students are held to be

less responsible for their failures than they are for their successes, the teachers discriminated the intentions of the students despite the outcome and did consider the intention of the student when determining whether the student could be held responsible and accountable for the result. The students were considered to be more responsible for succeeding when their intentions were to do well than they were for succeeding when their intentions to perform were less positive than those of their classmates. The students were considered to be less responsible for failing when their intentions to do well exceeded those of the other students in the class than they were for failing when they were less concerned about doing a good job than the other students in the class.

The outcome of the event had a significant effect upon the ratings of responsibility across all three levels of intent, but the magnitude of the effect varied across the three levels. Differing outcome produced the greatest effect for above average degree of intent to perform and produced the smallest effect for below average degree of intent to perform. The powerful outcome effect was most apparent when the child was described as being much less intent on doing a good job than most of the other students in the class, and the child was considered to be more responsible for passing than for failing. When the child was described as being about as intent on doing a good job as most of the other students in the class, the child was considered to be more responsible for succeeding than the child with below average intent and less responsible for failing than the child with below average intent. When the child was described as being much more intent

on doing a good job than most of the other students in the class, the child was considered to be much more responsible for succeeding than the students with average or below average intentions and was considered to be much less responsible for failing than the average and below average intentioned students.

Thus it can be seen that if a teacher perceives a child to be more intent on doing a good job than most of the other students in the class then the teacher will believe that something outside of the students control must have contributed to the failing grade. In such a case the child can not be held responsible to a considerable degree for the failure. Similarly, if a child was as intent on doing a good job as most of the other students in the class, the failure is somewhat unexpected and must have been the result of outside factors, to at least some extent. However, the child who was not particularly intent on doing a good job may be seen as one whose poor attitude had some causal contributing effect on the failure, and is thus more responsible for the failure than were other children who may have failed. The puzzling fact that "low intention" pupils who succeed are judged more responsible than those who fail is not readily explicable. It may be that success per se is more important in influencing the perceived responsibility for an outcome than is degree of intention, when the intention cue manipulated is regarding success. It would be interesting to see what the effects of intention to fail might be in this situation. In the case of success, it is clear that increased levels of positive intentions served to increase the teachers' beliefs about the responsibility of the child for the outcome. When considering the child with an above average intent to perform the teacher can be certain that the

child in a sense caused the outcome while successes from a child who was minimally motivated may have come from other chance sources in addition to the effects caused by the child.

Effort x Outcome Effects

The results of this study indicated that the relative level of effort of the student in the stimulus stories significantly affected the ratings of responsibility for both passing and failing outcome. Students were considered to be less responsible for their failures than they were for their successes, but in both cases the teachers discriminated the amount of effort expended by the students and considered the effort of the child when making a decision about whether the child was responsible for the final result.

Children were held most responsible for succeeding when their effort was greater than most of the other students in the class. Children were held least responsible for failing when their effort was greater than most of the other students in the class. Thus the child who demonstrated above average effort was considered to have caused, or at least contributed substantially, to the success; whereas, a child who put forth above average effort but failed was not held responsible for that failure. The failure was believed to rest outside the child's control and responsibility.

Children who demonstrated an average degree of effort were held less responsible for their success than were their above average counterparts. It may be that since the teachers believe they must provide the structure and instruction necessary to ensure success, a passing grade for a child who has put forth average effort was per-

ceived as partly due to the child's performance and partly due to the teacher's preparation. Therefore, while the child who put forth average effort can and was held accountable or responsible for achieving a passing grade the child has not contributed as much to the success as his above average effort classmate. Children who demonstrated average effort were held less responsible for their failures than for their successes. It appears that if the child has put forth at least as much effort as the average child in the class then the teacher would have expected the child to succeed. The lack of success may then be attributed to factors outside of the child such as the difficulty of the assignment or to other chance factors.

Children who demonstrated below average effort were considered to be least responsible for succeeding at the task and most responsible for failing. That is, a child who put forth less effort than most of the other students in the class was not considered to have affected the success or to be responsible for it to the same extent that other children did. Children with below average effort who passed were considered to be less responsible for the result than were children who put forth average effort but failed. Perhaps, if the teachers assume that they have given assignments that are appropriate for all children, then it would follow that no child should pass unless they put forth a certain expected degree of effort. If a child does succeed who has not shown effort then that child is not considered to be responsible for the successful result. Instead, some other chance factors such as prior experience, good guessing or perhaps even cheating are perceived to be at the root of the success. The child who does not demonstrate

the level of effort shown by most of the other students in the class is considered to be more responsible for the failure than the average effort child was for a success. Thus if a child does put forth some effort and succeeds some of the responsibility for the success is attributed to the child while some may be attributed to outside factors including the teacher, but if the child does not seem to put forth effort and fails then a greater proportion of the responsibility remains with the child.

Differential Effects of Intention and Effort on Responsibility Ascriptions

The most important aspect of these results is the greater magnitude of effects for effort cues than for intention cues on ascriptions of causal responsibility. This finding is in direct opposition with the predictions based upon Heider's theory. It appears that intention is not the primary determinant of causal responsibility but that effort is the more important attributional cue. Thus teachers look to information from the effort variable to decide the cause of and the locus of responsibility for the outcome. It may be that intention is perceived to have some role in the final outcome by the influence that it exerts upon effort. That is, good intentions can have an effect on the amount of effort that an individual expends and thus, indirectly play some role in the assignment of causal responsibility. However, because effort has a more direct effect upon the outcome its influence on ascriptions of responsibility are much greater.

In addition, the differential effects of intention and effort that were found for evaluative judgments were reflected in related

differential effects on responsibility ascriptions. The decreasing trend in ascriptions of responsibility for success from above average level of effort and intent to the average level of these variables was enhanced as effort decreased from average to below average but was diminished as intention decreased from average to below average. Similarly, in the case of negative outcome the increasing trend in ascription of responsibility for failure that accompanied decreasing levels of effort was enhanced as the level of effort moved from average to below average while the increase in the ascription of responsibility for failure that accompanied a decrease from above average to average intention was diminished beyond the point of average intent.

There are a number of hypotheses that could be generated from the various elements of attribution theory to explain aspects of the results obtained for responsibility ascriptions. It could be suggested, for example, that children are considered to be responsible for those events over which they had control or for which they had freedom to alter the outcome. If low effort was perceived to be more readily alterable by the teachers themselves than low intent, then it might be expected that those same teachers would hold children more responsible for failure based upon low effort than for failure based upon poor intentions. However, a more comprehensive and empirically plausible explanation for the responsibility data parallels one put forth for the evaluation data. That is, the differential effects of intention information and effort information are based upon certainty of inference. Teachers can be more certain that observations of low effort were valid than that inferences of low intent were valid. Thus

teachers could be free to utilize the cues of below average effort but be inhibited in their use of inferences of low intent when ascribing responsibility or determining the source of blame for the failure. This certainty of inference may also be related to beliefs about actual causal power. That is, although a low level of intent to perform could affect an outcome through some indirect means (i.e., influencing effort) low effort could be considered more causal in the sense that it could have a direct effect on the outcome, and thus be more responsible for the observed failure. Such an hypothesis, once again, leads to a view of "intent" and "effort" as variables at different levels of abstractness, the latter being more directly observable.

The results obtained here showed somewhat different effects for intention cues and effort cues on ascriptions of responsibility. Thus, while these two factors can not be shown as yet to be clearly distinct, they can no longer be treated as equivalent. Future research and theoretical endeavors must take these findings into account and attempt to clarify their meaning.

Relationship Between Evaluative Judgments and Responsibility Ascriptions

Attribution theory is built upon the premise that ascriptions of responsibility organize causal attributions and thus directly affect evaluative judgments. It has been suggested that when responsibility for an event is assigned to an individual, the evaluations of the individual would be more extreme than when responsibility for an event does not rest with the individual being evaluated. It would make sense than an observer would be more neutral in evaluation of individuals who

are not responsible for the event being evaluated. One would expect that an observer would be more positive toward someone who was considered responsible for affecting a positive event than toward someone who was not responsible. Likewise, it is reasonable that an observer would be more negative in their evaluation of someone considered to be responsible for a negative event than toward someone who was not held responsible for the negative event. Although responsibility ascriptions are considered to be a primary link between an event and its evaluation, the systematic empirical examination of the relationship between responsibility ascription and achievement evaluation has not been extensive. One of the purposes of this study was to examine the relationship between the ascriptions of responsibility made for a series of achievement related stories and the evaluative judgments of the same stories for elementary school teachers.

It is assumed that the assignment of causal responsibility is at the root of the evaluative process. Thus it would be expected that responsibility ascriptions and evaluative judgments would be systematically related. The relationship between responsibility ascriptions and evaluative judgments could take a number of forms. Such a relationship could be found in the degree of responsibility attributed by teachers to a student for a particular event and the specific evaluation given to the student for that event. Second, it is possible that the relationship between responsibility ascriptions and evaluations could be found between the degree to which an individual holds others in general to be responsible for events and the extremeness of the individual's evaluations. Thirdly, the relationship could involve parallel effects upon the utilization of the various classes of causal cues in

the evaluative process and in responsibility ascription. The data indicated that there was no meaningful relationship between the degree of responsibility attributed by a subject to a child in a specific story and the actual evaluation by the subject to that story. That is, for each story, the differences between subjects in the assignment of responsibility ratings did not parallel the differences between subjects in the extremeness of evaluations. The absence of a significant correlation between evaluation and responsibility ascription may be related to the scales used to gather the two dependent measures. It is possible that within any given story, the range of responses on the scale of evaluations and particularly the range of responses on the scale of responsibility ascriptions may have been too restricted. For example, if the subjects in the sample were grouped around a single responsibility rating for any given story then the range of scores would be too restricted to permit a correlation to be found. For that reason, correlations were also calculated across stories for the four separate between-subject groups. There was, however, no meaningful relationship found between a subject's general tendency to hold the children responsible and that subject's tendency to give extreme evaluations. Since evaluations were not correlated with responsibility ascriptions the hypotheses put forth by Heider and Weiner were not supported.

The results of this study are perplexing in that despite the absence of a correlation between individual differences in responsibility ascriptions and evaluative judgments, there was a strong similarity between the pattern of manipulated effects found for responsibility ascriptions and the pattern of manipulated effects found for evaluative judgments. That is, while individual differences between

subjects in how responsible they held pupils for an event failed to predict individual differences in evaluative extremeness (and vice versa), there was a strong parallel found between the manner in which subject's responses on these two dependent measures were affected by the informational cues presented (Rho = .850). Thus, individual differences in how responsible teachers hold pupils for events and how extremely they evaluate them appear to be largely determined independently. Yet the more sensitive measure of relationship between these two variables - the correlation between how subjects altered their judgments according to the cues manipulated - revealed that the two judgment systems are at least partly based upon parallel rule systems. Even the high rho value of .850 obtained is probably an underestimate of the degree of relationship here, since only five of the 24 instances in which a difference in ranks of 10 or more (out of a total of 72) involved a judgment of a rank lower than 30.

Another clue indicating that responsibility ascriptions do affect evaluations rather than being independent of them was found in the significant effort x order interaction for evaluations. This showed that the effects of perceived effort upon evaluations were magnified when responsibility was judged prior to the evaluations being made. No interactions of order with any other variable were found for the responsibility judgments, however, indicating that the relationship does <u>not</u> run the other way (i.e. evaluation influencing responsibility).

In addition, the comments made by teachers on the data forms and information obtained through discussions with teachers about situations that arise in a classroom certainly indicate that a student's

responsibility for an outcome is very cogent to them when they are considering how to evaluate the student. Such naturalistic observations in conjunction with the strong parallel in treatment effects of responsibility ascriptions and evaluative judgments shows that further investigation in this area is required, perhaps by directly manipulating each type of judgment as an informational cue to see its affect on the other.

Conclusion

A number of questions were addressed in this study. The two primary issues involved the differential utilization of motivational cues in the attribution and evaluation process, and the relationship between responsibility ascriptions and evaluations. An additional aspect of the investigation was the examination of the role of the situational variable locus of outcome consequence in the evaluation of achievement behavior.

The results indicated that both intention cues and effort cues influenced teachers' evaluations of students. Different patterns were found for intention effects than for effort effects. The results also indicated that both intention cues and effort cues affected ascriptions of responsibility. Different patterns were found for intention effects than for effort effects, with the patterns of evaluation and responsibility ascription being very similar. Several explanations of these results were presented including differences in attribution of responsibility, differences in the certainty of teachers' inferences, and differences in teachers' expectancies. The soundest alternative for interpreting the results is one that is contradictory to Heider's (1958) differentiation of the role of intent cues as opposed to the role of effort cues, and is instead more in keeping with the suggestions made by Ryan (1970). That is, it appears that effort is the primary motivational cue for ascribing responsibility and thus for reaching an evaluative judgment. Intention is secondary in its degree of utilization, particularly if not supported by effort information. Intention

is likely to be the more "derived" or abstract judgment, more closely linked to inferred integrations of behavior than to the facts available to an observer, and thus less trusted as an empirical criterion for responsibility ascription and evaluation than is effort. Both motivational cues, however, are operative on such judgments.

The correlations between responsibility ascriptions and evaluative judgments between individuals for the various conditions were not significant. There were, however, indications in the results and from comments made by teachers that decisions regarding the responsibility of students do affect their evaluations of students. In addition, the pattern of effects from the various classes of information were highly parallel for both responsibility ascriptions and evaluative judgments. It is essential that mediational activity of responsibility ascriptions in the evaluation process be examined in greater detail.

Suggestions from previous research regarding the effects of locus of outcome consequence in the evaluation process were not supported by the results of the current study. It appears that there is a need for the systematic analysis of this variable in the context of a number of different school related tasks so that the findings of attribution studies can be generalized to the natural school environment.

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APPENDIX

DISTRICT _____

GRADE _____

YEARS OF EXPERIENCE _____

SEX _____

This is a study of how teachers evaluate the performance of their students. When responding to each story, please answer quickly with the first impression that you have. In this way the entire task should take no more than 20 minutes of your time.

Thank you very much for your assistance.

Individual Task

You have been working with your students on a particular unit in social studies. The unit has been broken down into several specific topics. Each student in the class has been assigned one specific topic about which to gather information and write a report. The students have had three weeks to work on their projects.

When you assigned the projects, you informed the students that they would be graded on a pass/fail basis according to specific objective criteria which you outlined. You also informed the students that the reports would be returned to them on the Monday following the due date. The students were advised that anyone who failed to complete his project satisfactorily would have to do additional work in school on that Monday to make up for the failure.

You and several other teachers had been planning a field trip for the fourth, fifth and sixth grades, and due to the difficulty of coordinating schedules, the only practical date for the trip is the same Monday on which your students must make up for failing grades on their projects. You, therefore, made arrangements for an aide to remain with any students who fail to complete the assignment so that, even if some students fail the project, you would be able to take the rest of your students on the trip. You have explained these arrangements to all of the students in the class. The students know that if they receive a failing grade on their report, they will have to miss the field trip.

Group Task

You have been working with your students on a particular unit in social studies. The unit has been broken down into several specific topics. Each student in the class has been assigned one specific topic about which to gather information and write a report. The students have had three weeks to work on their projects.

When you assigned the projects you informed the students that they would be graded on a pass/fail basis according to specific objective criteria which you outlined. You also informed the students that the reports would be returned to them on the Monday following the due date. The students were advised that anyone who failed to complete his project satisfactorily would have to do additional work in school on that Monday to make up for the failure.

You and several other teachers had been planning a field trip for the fourth, fifth and sixth grades, and due to the difficulty of coordinating schedules, the only practical date for the trip is the same Monday on which your students must make up for failing grades on their projects. You, therefore, made arrangements for an aide to remain with any students who fail to complete the assignment so that even if some students fail the project, you would be able to take the rest of your students on the trip. However, you have just recently learned that an aide will not be available on that day. Therefore, if any students fail the project, you will have to postpone the trip for all of your students.

You have explained these arrangements to all of the students in

the class. The students know that if they receive a failing grade on their report, they will have to miss the field trip and that as a result, their classmates will have to miss the trip also.

Evaluation

As a teacher, you frequently find yourself in a position of making evaluative judgments about your students. At times you may be quite pleased by a particular student's behavior, at other times you may be quite displeased, and at other times your evaluation may be somewhere between these two extreme points.

Place yourself in the situation presented on the following pages. Please read carefully each of the descriptions of a student's behavior and respond as you actually do with students in your class. Indicate your reaction to each child's behavior by using the alternative choices printed beneath each story. Pluses indicate that you are pleased by the child's behavior and minuses indicate that you are displeased. Five pluses would mean that you are very pleased; one plus would mean that you are minimally pleased. Five minuses would mean that you are very displeased; one minus would mean that you are minimally displeased.

Please select an answer for <u>every</u> story and clearly mark only <u>one</u> choice for each. If you have any comments about the specific stories, please feel free to include them in the space provided.

Responsibility

As a teacher you frequently find yourself in a position of making a judgment about a student's personal responsibility for an event. That is, you must decide whether a student can be held accountable for the outcome of the event. At times you may feel that a student is definitely responsible for the outcome; at other times you may feel that the child is not at all responsible for the outcome; and at other times your feelings about a child's responsibility may lie somewhere between these two points.

Place yourself in the situation presented on the following pages. Please read carefully each of the descriptions of the student's behavior and respond as you actually do with students in your class. Indicate your reaction to each child's behavior by using the alternative choices printed beneath each story. If you feel that the outcome definitely is not the personal responsibility of the child, you would circle alternative 1. If you feel that the outcome definitely is the personal responsibility of the child, you would circle alternative 5.

Please select an answer for <u>every</u> story and clearly mark only <u>one</u> choice for each. If you have any comments about the specific stories, please feel free to include them in the space provided.

111

Dan is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was much more intent on doing a good job on this project than were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much more effort into his project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Dan's report clearly should be rated as a "pass". He will not have to do additional work for this unit, and he will be able to go on the field trip.

112

Jim is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was much more intent on doing a good job on this project than were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much more effort into the project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Jim's report clearly should be rated as a "fail". Jim will have to do additional work for this unit, and as a result, he will be unable to go on the field trip.

121

Joan is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much more intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put about as much effort into her project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Joan's report clearly should be rated as a "pass". Joan will not have to do additional work for this unit, and she will be able to go on the field trip.

122

Carol is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much more intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put about as much effort into her project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Carol's report clearly should be rated as a "fail". Carol will have to do additional work for this unit, and as a result, she will be unable to go on the field trip.

131

Lisa is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much more intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much less effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Lisa's report clearly should be rated as a "pass". Lisa will not have to do additional work for this unit, and she will be able to go on the field trip.

132

Ann is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much more intent on doing a good job on this project than most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much less effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Ann's report clearly should be rated as a "fail". Ann will have to do additional work for this unit, and she will be unable to go on the field trip.

211

Allan is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much more effort into his project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Allan's report clearly should be rated as a "pass". Allan will not have to do additional work for this unit, and he will be able to go on the field trip.

212

Joe is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much more effort into his project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Joe's report clearly should be rated as a "fail". Joe will have to do additional work for this unit, and as a result, he will be unable to go on the field trip.

221

Tim is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put about as much effort into his project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Tim's report clearly should be rated as a "pass". Tim will not have to do additional work for this unit, and he will be able to go on the field trip.

222

Bob is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put about as much effort into his project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Bob's report clearly should be rated as a "fail". Bob will have to do additional work for this unit, and as a result, he will be unable to go on the field trip.

231

Tom is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much less effort into his project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Tom's report clearly should be rated as a "pass". Tom will not have to do additional work for this unit, and he will be able to go on the field trip.

232

John is generally capable of an average level of achievement in all of his work. From statements that he has made to you and to several of his classmates, you inferred that he was about as intent on doing a good job on this project as were most of the other students in the class. From the amount of time he spent both gathering information and writing the paper, you have determined that he put much less effort into his project than did most of the students in the class.

On the basis of the objective criteria which you had specified, John's report clearly should be rated as a "fail". John will have to do additional work for this unit, and as a result, he will be unable to go on the field trip.

311

Kathy is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much more effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Kathy's report clearly should be rated as a "pass". Kathy will not have to do additional work for this unit, and she will be able to go on the field trip.

312

Janet is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much more effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Janet's report clearly should be rated as a "fail". Janet will have to do additional work for this unit, and as a result, she will be unable to go on the field trip.

321

Karen is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put about as much effort into her project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Karen's report clearly should be rated as a "pass". Karen will not have to do additional work for this unit, and she will be able to go on the field trip.

322

Sharon is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put about as much effort into her project as did most of the students in the class.

On the basis of the objective criteria which you had specified, Sharon's report clearly should be rated as a "fail". Sharon will have to do additional work for this unit, and as a result, she will be unable to go on the field trip.

331

Beth is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much less effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Beth's report clearly should be rated as a "pass". Beth will not have to do additional work for this unit, and she will be able to go on the field trip.

332

Debra is generally capable of an average level of achievement in all of her work. From statements that she has made to you and to several of her classmates, you inferred that she was much less intent on doing a good job on this project than were most of the other students in the class. From the amount of time she spent both gathering information and writing the paper, you have determined that she put much less effort into her project than did most of the students in the class.

On the basis of the objective criteria which you had specified, Debra's report clearly should be rated as a "fail". Debra will have to do additional work for this unit, and as a result, she will be unable to go on the field trip.